NATION'S SCHOOLS

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

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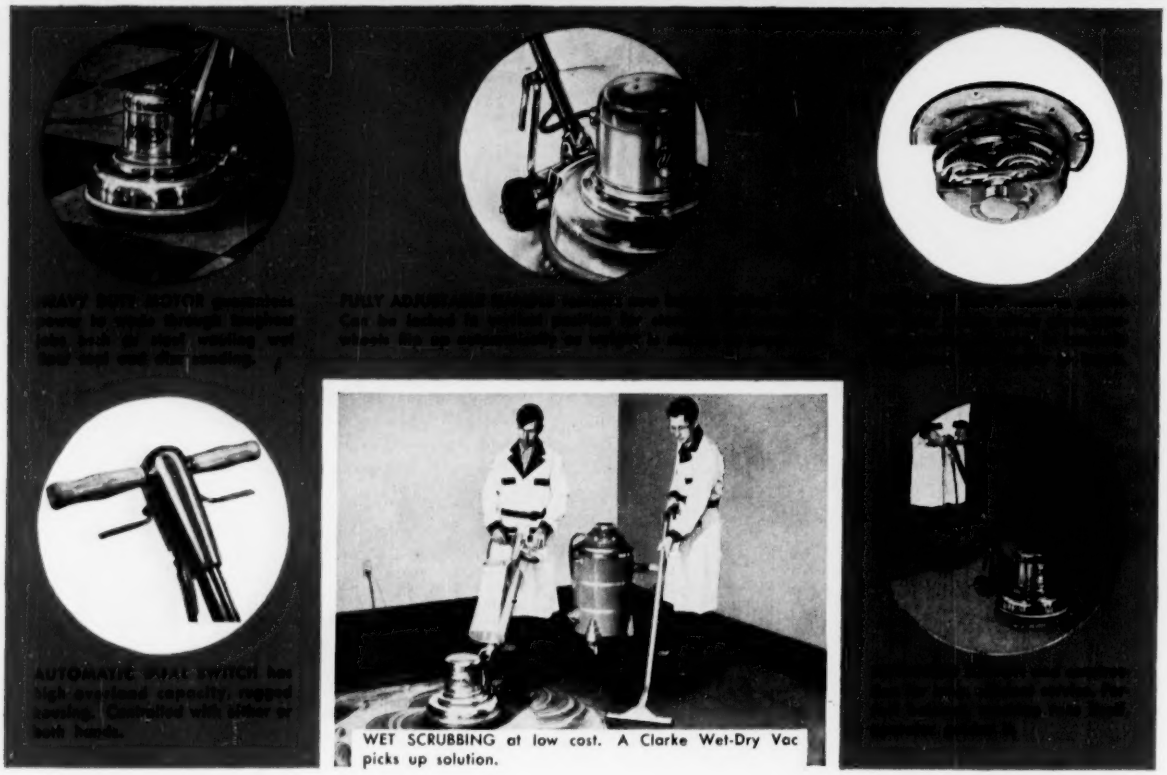

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THE NATION'S SCHOOLS

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

DECEMBER 1954

ARTICLES

SCHOOLHOUSE PLANNING

AUDIO-VIDEO

THE SCHOOL LUNCH

MAINTENANCE AND OPERATION

REGULAR FEATURES

AMONG THE AUTHORS


Ernest O. Melby

From his long experience as a teacher and administrator in public schools and universities, ERNEST O. MELBY offers some words of advice about democracy in school administration (*p.* 35). Dr. Melby has been dean of New York University's school of education since 1945. His first position, which he accepted 41 years ago, was as high school teacher and principal in his home state of Minnesota; later he served as superintendent of schools in the same state. In 1928 he joined the faculty of Northwestern University, and, subsequently, became associate professor, professor and dean of the school of education. After serving for two years as president of Montana State University, Dr. Melby was named chancellor of the University of Montana in 1943. In the latter position he was the administrator responsible for higher education in the state. Dean Melby is a former president of the John Dewey Society and a former director of the National Society for the Study of Education.


Peter F. Oliva

At one time or another PETER F. OLIVA has held certificates from California (general secondary school credential), Maryland (high school teacher), and New York (high school teacher, guidance and administration). His experiences with certification laws in these three states aroused his interest in the subject of interstate barriers for teachers, a subject he discusses on page 44. Dr. Oliva has been a high school teacher in Maryland and New York and a guidance director in the latter state. Currently he is associate professor of education at the University of Mississippi.

KENNETH E. PRIESTLEY, author of "An Englishman's View of School Administration, U.S.A." (*p.* 47), is professor of education (since 1951) and dean of the faculty of arts (since 1953) at the University of Hong Kong. From 1936 to 1951 (except for the war years, which he spent as a staff captain in the army intelligence corps, S.H.A.E.F.) he was a teacher and administrator in English schools. After a year as senior master in history at Stowmarket Grammar School, he accepted a similar position at Stamford School, Lincolnshire, and served concurrently as lecturer in education at Nottingham University. In 1946 he was named area officer, and later assistant director of education, for Cumberland County. Mr. Priestley visited the United States in 1952-53 as a Fulbright research professor to compare American and English methods of educational administration. He returned to North America this year, under the auspices of the Commonwealth Interchange Committee, London, to visit Canadian universities.


Maurice E. Stapley

As an author and a coordinator, MAURICE E. STAPLEY is recognized as an authority on school board problems, such as the writing of policies (*p.* 50). Among the bulletins, handbooks and monographs he has written are "The Indiana School Board Member" and "Effectiveness of School Board Members." Last year he was coordinator for the first nationwide work conference for state school board association leaders; this year he was coordinator for the second such conference. He's also coordinator of the program for school board functions and relationships for the Midwest C.P.E.A. After 18 years as a teacher and superintendent in Illinois and Indiana, Dr. Stapley joined the staff of Indiana University in 1946. Since 1953 he has been professor of school administration and assistant dean of the school of education at Indiana.


Harold B. Gores

A "different" solution to the problem of constructing an addition to a school was found at West Newton, Mass. HAROLD B. GORES, superintendent of the Newton public schools, explains (*p.* 56) what and why. After serving three years as junior high school principal at Littleton, Mass., and a year as a mathematics teacher at Lexington, Mass., Dr. Gores went to Newton in 1935 as mathematics teacher and guidance counselor. Successively, he became administrative assistant and secretary of the school committee, assistant superintendent, and, in 1949, superintendent. Dr. Gores is northeast regional chairman of the Fulbright teachers exchange program and New England director of the program of fellowships for high school teachers of the Fund for the Advancement of Education.

Who should teach music in the grade schools? The classroom teacher, says RUSSELL LEWIS (*p.* 69). Mr. Lewis has taught instrumental, vocal and classroom music on both the elementary and the secondary levels and has been supervisor of music in Arizona schools. This year he is instrumental music instructor in the elementary schools of Delano, Calif.

MEGASCOPE

How well can schools serve the exceptional child?

When teachers cross the border!

Why do administrators become conservative?

Growing pains for school business administration

A brief, analytical look at several features in this issue by CALVIN GRIEDER, professor of school administration, University of Colorado

The Road to Conservatism. It is a good thing to pause once in a while and take stock of changes in the realm of education. Ernest O. Melby casts an appraising eye on possible effects of contemporary emphasis on democratization of administration (*p.* 35). His tentative conclusions are bound to make many a reader squirm rather uncomfortably as he follows Melby's argument and applies it to situations in his own experience. While the examples are drawn mostly from higher education, they are also meaningful for the public schools. I will be surprised if a rejoinder is not forthcoming to what seems to be Melby's main point: With increasing responsibility and power, faculties have tended to become conservative. The attention of school and college faculties should be directed to this article.

More Than Clichés. As is true of other professional fields, educators are prone to give lip service to certain clichés, with too little concern for their real meaning. One of the most popular is that "schools must undertake to provide for individual differences"—the performance of which, we must admit, has baffled us. It is to this concept that H. L. Shibler addresses himself (*p.* 38), in a way that is somewhat different from the usual approach. He proposes that the test of our allegiance to this basic principle is how well special education is attended to. While Shibler dwells more on the needs of the various groups of handicapped children, the needs of superior pupils are not overlooked. One may take issue with some measures used in the large Indianapolis school system, such as centralizing all junior high special classes in one school. It is strange that the less able children, for example, are required to make the longest and most hazardous trips between home and school. But it is clear that a great deal of excellent work is being done in an area too often neglected in our schools.

"On the Square." When I began the article on cafeteria operations by Richard Flambert (*p.* 80), I thought, "This is big-time stuff; not much in it for small and medium sized schools." That impression was partly dispelled as I read on, and then near the end I struck high-grade pay dirt. That plan he tells about for serving meals "on the square" looks like an innovation of genuine merit.

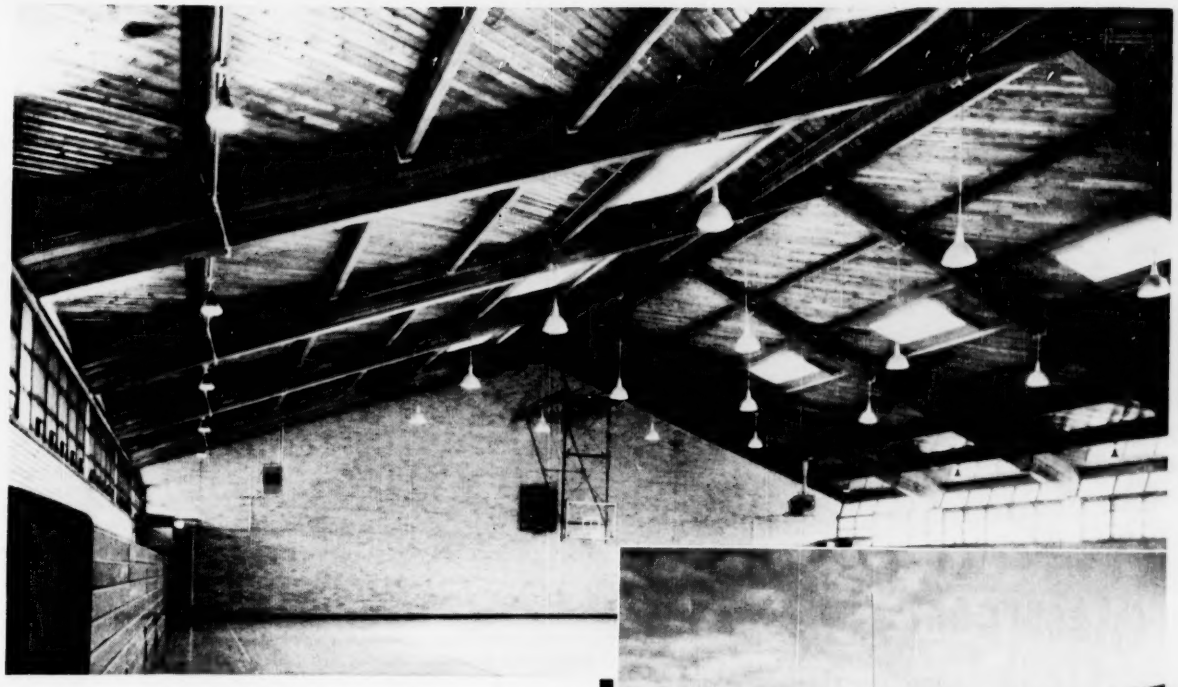
Board Policies vs. Rules. A phenomenon of school board action in the last few years is the astonishing growth of interest in developing written policies. There has been a good deal of confusion and puzzlement, though, about policies on one hand, and rules and regulations on the other. The latter we have had for many, many years; the former have come on the scene relatively recently, as the function of school boards has emerged more clearly. Most timely, then, comes M. E. Stapley's helpful analysis (*p.* 50) of the difference between the two. The illustrative material makes the distinction clearer than anything else I have read.

Not Unmixed Blessings. One of the advantages of the teaching profession used to be the relative ease with which one could move, in contrast, for instance, with an attorney or doctor, who had to build up a new practice. Three developments have occurred, however, tending to tie teachers down: certification laws and regulations, tenure legislation, and state retirement plans. All three have been vigorously fostered by the profession itself, and no doubt they have brought gains, but not undiluted gains. Taking certification as his subject, Peter F. Oliva demonstrates (*p.* 44) that the present state of affairs is rapidly becoming, if indeed it is not already, intolerable. One may well marvel at the endurance and hardihood of those teachers who do negotiate a move from one state to another.

Enlightening. Two significant contributions to school plant planning appear this month. John McFadzean (*p.* 62) submits a strong case for adequate site development as part of every project. There is no doubt that site development often gets rather cavalier treatment, with effects that grow worse with the passage of time. His comprehensive view of what site planning and development encompass is enlightening. Harold B. Gores (*p.* 56) describes an intriguing new type of addition that may be moved from one site to another—not without some loss but fairly economically nevertheless. The structure itself is not cheap.

A.S.B.O. Comes of Age. The editor comes through with an excellent report (in two parts, *p.* 52 and *p.* 88) on the recent convention of school business officials. Unlike most convention reporters, he gives enough of the main speeches to enable the reader to get something from them. The program itself reveals the extensive scope of school business affairs and the efforts of the A.S.B.O. to professionalize the field. I think I detect, although I may be mistaken, some subtle overtones of conflict between the "old guard" and the ranks of the younger members. This is not rare in a profession coming of age, and should not create undue concern.

The Spirit of Eire. Harold G. Shane, in his letters from Europe (this month from Eire, *p.* 72), shows himself a master not only at conveying salient facts about national systems of education but also at capturing their spirit. On this side of the water, most of us will, as we read his series, be ever more thankful for our good fortune. Yet now and again our self-complacency will be punctured by the superiorities of our friends across the seas. Shane is doing a fine service in promoting our understanding of the what and why of European schooling.



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QUESTIONS AND ANSWERS

Two-Year Course for Teachers

Should the state consider a two-year terminal course in teacher education until the present crisis in teacher supply has passed?

This morning I asked several upper classmen in our college to give their reactions to the proposed terminal sequence of two years in teacher education until the crisis in teacher supply has passed. The unanimous reply was this proposal is unwise because regaining the loss would be unlikely for many years. Also, they said, a two-year sequence is grossly inadequate because of the necessity for a broad liberal or general education of at least two years, underlying professional education.

These young men think a period of two years of professional education following the general education is inadequate. (For a permanent certificate the state of Washington requires six years, including the initial year of teaching under the supervision of the college and the school district between the fourth and fifth years on campus.)

A veteran appointment secretary agreed heartily with the young men; the thought of this backward step is tragic, in her opinion.

This country is rich and prosperous and can solve the problem of the teacher supply in ways other than by lowering the standards of teacher education. If I understand the critics of public education, they do not want more poorly educated teachers. The parents of the children in our schools want more and better teachers, and they know the standards of teacher education cannot be lowered.—W. W. HAGGARD, *president, Western Washington College of Education.*

Fund Raising by Students

Where can we draw the line on fund raising by high school students?

I'm not sure just where this line is to be drawn, but it must be established if those of us who wrestle with this problem each year are to be helped.

High school students are characterized by an abundant enthusiasm, partly reflected in their requests for bigger and better yearbooks, bigger and better class trips, and many additional activities. We should rejoice over this enthusiasm, but it is the very thing that sometimes needs reining.

Some will not agree with the following four statements, but, if there is any agreement, we may be able to locate the ideal place to draw the line:

1. Students should be allowed to solicit advertisements for school publications. I have never been sure about advertisements in the yearbook, but we do allow them.

2. Students should be allowed to sell tickets to a few—we did not define few—school programs, such as band concerts or plays.

3. Students might be allowed—during the school day—to sell one or two minor items needed at school.

4. Students might be allowed to operate the concessions at athletic contests.

It seems to me it is past time for us to draw that line.—FRED B. DIXON, *principal, John Marshall High School, Richmond, Va.*

The Nation's Schools

READER OPINION

Japan's Jintaro Kataoka was one of the visiting educators interviewed by The NATION'S SCHOOLS *at the A.A.S.A. convention early this year. This interview and his picture appeared in our March 1954 issue, pages 74 and 76.*—Ed.

Japanese Educator Translates Mutual Understanding

Sirs:

While in America I was fortunate enough to visit dozens of governments, federal and local, numbers of universities, high schools, elementary schools, kindergartens and various other educational and social institutions. I have visited with more than 350 very important people during my trip of observation over there. However, it is not my intention to advise my office to cope with the supergorgeous equipments of American schools, or to propagandize to my Japanese friends about the kindnesses American people were ever so ready to extend—or "sell" (as Cyril Connolly expresses himself) to me.

The people whom I have met, and who helped me in every possible way imaginable, are without a single exception very vividly impressed "upon my retina," as a Japanese phrase goes.

The interval of four months between my last glimpse of your country and the present letter of thanks of mine has enabled me to have a better purview of the impressions of the U.S.A. upon a Japanese: Prosperity is too often a cause of the scales on the eyes; poverty of a needless worry or short-sightedness. Sharp insight will be needed to modulate the swing or oscillations between the two extremes. Mutual understanding is mutual understanding. An unhatched egg will never be a chicken. Informations packed in you and me and exchanged must be hatched so that they will help turn a stone in building up the coveted world peace.

I am very pleased to say a commonplace thing that, in spite of the different dressing of foods, I lost no pound while in your country, and that I am very busily engaged in my office for the cause of cultural exchanges between Japan and foreign countries. The tangible as well as the intangible "materials" I got from my trip this

(*Continued on Page* 110)

Roving Reporter

Geometry Class Makes Christmas Tree Decorations • Board of Education Gives Junior College Scholarships to Prospective Teachers • Sixth Graders Sell Praying Mantis Egg Sacks • Kindergarteners Construct Life-Size Santa Claus

GEOMETRY STUDENTS at North High School, Columbus, Ohio, decorate a Christmas tree as part of their course work. Each of the decorations is either a plane or a solid geometric figure.

Their teacher, Ella M. Reynolds, has had her classes do similar work each year for more than 10 years. She says it's an excellent means of teaching geometric principles in an interesting and practical manner.

BECAUSE THEY WANTED to raise funds for class field trips, sixth graders at New Lebanon School, Greenwich, Conn., decided that they would go into business.

The youngsters began collecting praying mantis egg sacks and selling them, by mail, at the rate of two sacks for a dollar. The mantes hatched from one egg sack are said to keep a quarter of an acre of lawn or garden clear of insect pests.

Each egg sack is attached to the twig of a bush. The purchaser hangs the twig on a tree; in the spring the praying mantes hatch and go to work.

This project, according to Teacher George Kopp, enabled his pupils to combine lessons in science, conservation, mathematics, business and language arts. They did the work almost entirely on their own.

After they had investigated various advertising media, the boys and girls decided to place their advertisements in a daily newspaper. Committees were appointed to perform the various tasks: wrapping, addressing, bookkeeping and so on. Every pupil was named to a committee. After each order had been received, recorded and filled, the customer was sent an individually written letter of thanks.

Proceeds from the project were placed in a class bank account.

A LIFE-SIZE SANTA CLAUS, constructed by the children, spent the pre-Christmas season in a kindergarten room at Iowa State College Campus School last year.

The boys and girls, with the aid of some tips from Kenneth Gogel, elementary supervisor of arts and industries, selected the materials from which to make their Santa Claus. His "backbone" was a board jutting upright from a wooden base. Cardboard boxes, with holes cut into the ends, were placed over the board. While some children held crumpled newspapers against the boxes, others marched around and around with string, fastening the papers to the boxes. Later, for smoothness, other newspapers were pasted, with wallpaper paste, over the crumpled papers.

A hole was sawed in a discarded world globe so that it would fit over the "backbone" and serve as a basis for Santa's head. Newspapers were pasted over the globe; features of the face were drawn on a piece of paper which then was pasted on the head. Stuffed mittens were placed on the ends of the arms, which were boards stuffed into Santa's sides.

The youngsters had to stretch the 6 foot 3 inch Santa out on the floor for the painting job. After one side had been painted red, the children rolled him over and painted the other side.

When Santa was nearly completed, the children decided he needed papier mâchè boots. Then a youngster realized that something else was missing. So fur bands, made of cotton, were placed at the bottom of Santa's coat and on his sleeves. His beard also was made of cotton. Some discarded drapery material was used for his red stocking cap.

TO AID in the selection and recruitment of outstanding elementary teachers, the board of education at Chanute, Kan., each year presents 10 scholarships to seniors who plan to attend Chanute Junior College.

One senior in each of the seven surrounding towns and three seniors in Chanute High School are given the scholarships, which cover tuition, fees and books for the first 60 college hours leading to an elementary teacher's certificate.

A committee of teachers in each of the schools is asked to select the student it thinks is most likely to succeed as an elementary teacher. Qualifications suggested as a basis for selection are: at least a B grade average, a liking for children, good health, neatness in appearance, a pleasing voice, a command of English, enthusiasm, poise, tactfulness and sympathy.

Since 1952, when presentation of the scholarships began, the junior college's elementary education department has shown a steady increase in enrollment and an improvement in the quality of students, according to the department's director, Nora Knight.

An active Future Teachers of America group has been organized. Since 16 of the members are scholarship winners, the group plans to establish a fund to make an eleventh scholarship available annually.

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A. D. Brainard, Deputy Superintendent
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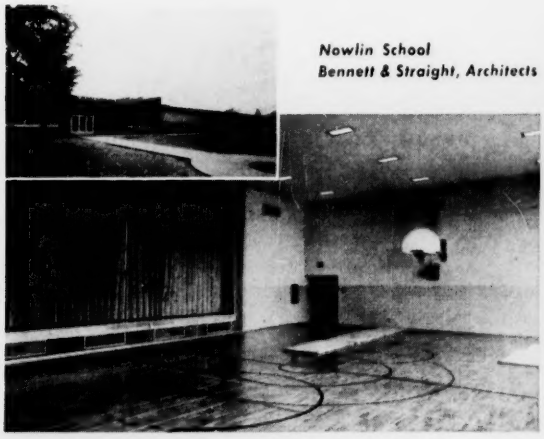

Nowlin School
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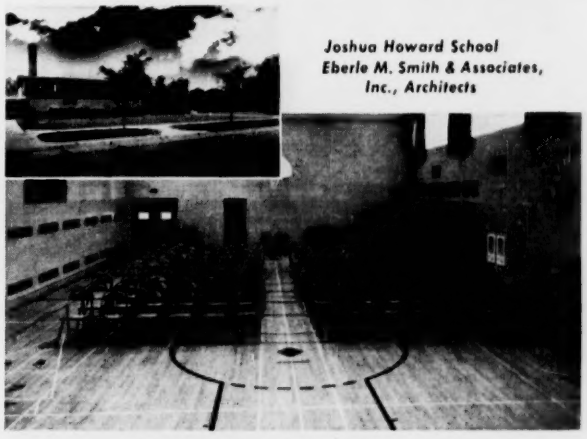
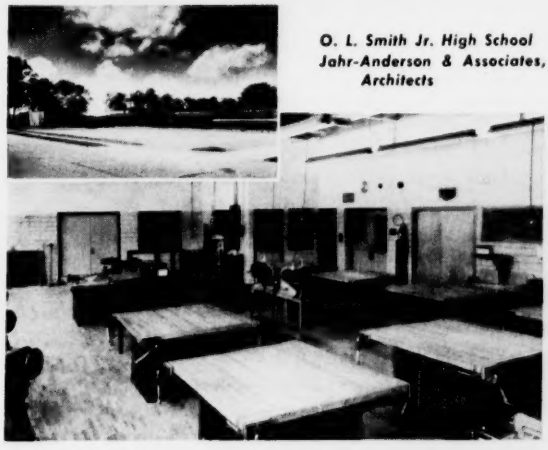
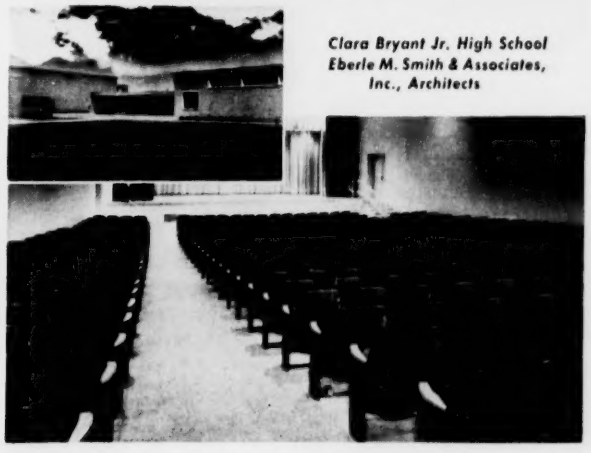


Joshua Howard School
Eberle M. Smith & Associates, Inc., Architects



O. L. Smith Jr. High School
Jahr-Anderson & Associates, Architects



Clara Bryant Jr. High School
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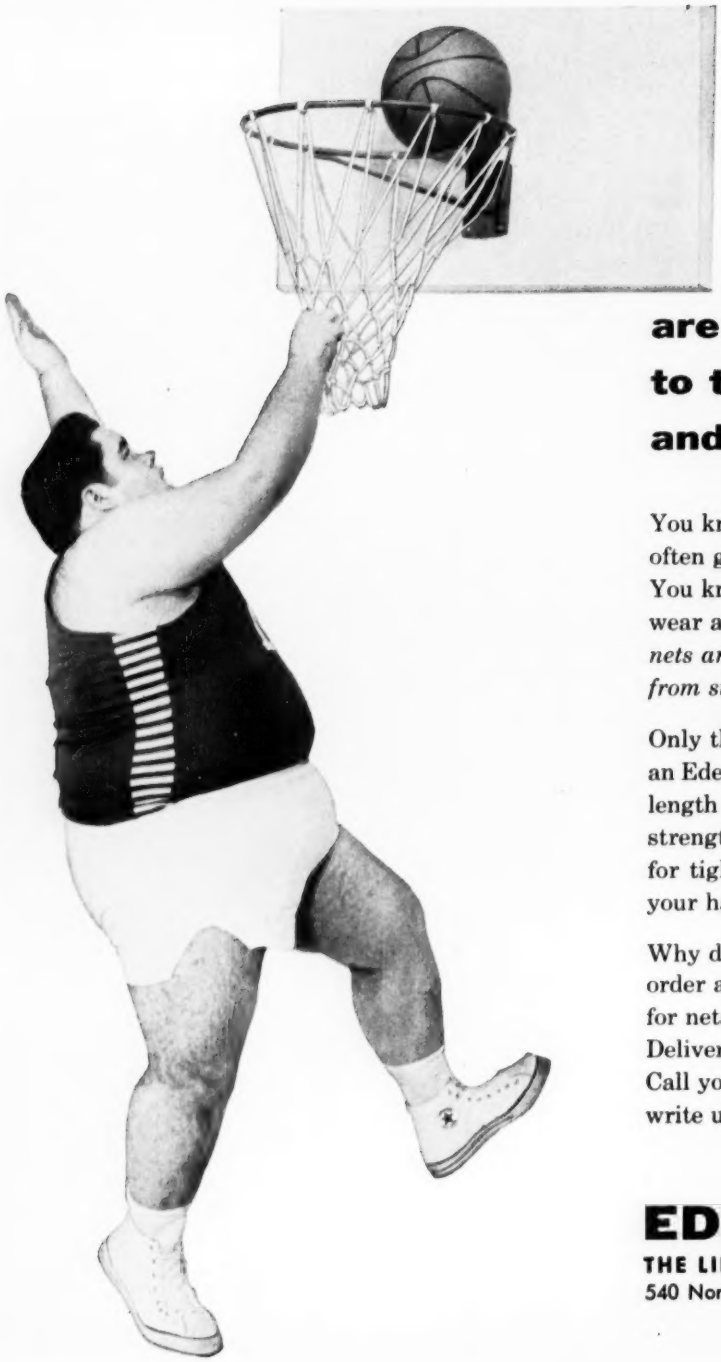

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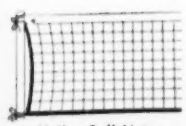
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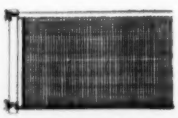
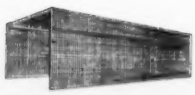
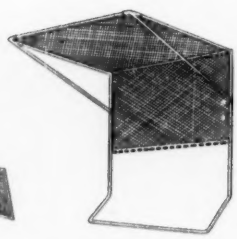
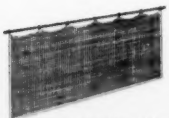
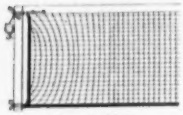
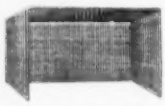

Badminton Nets


Baseball Batting Cages


Moveable Baseball Backstops

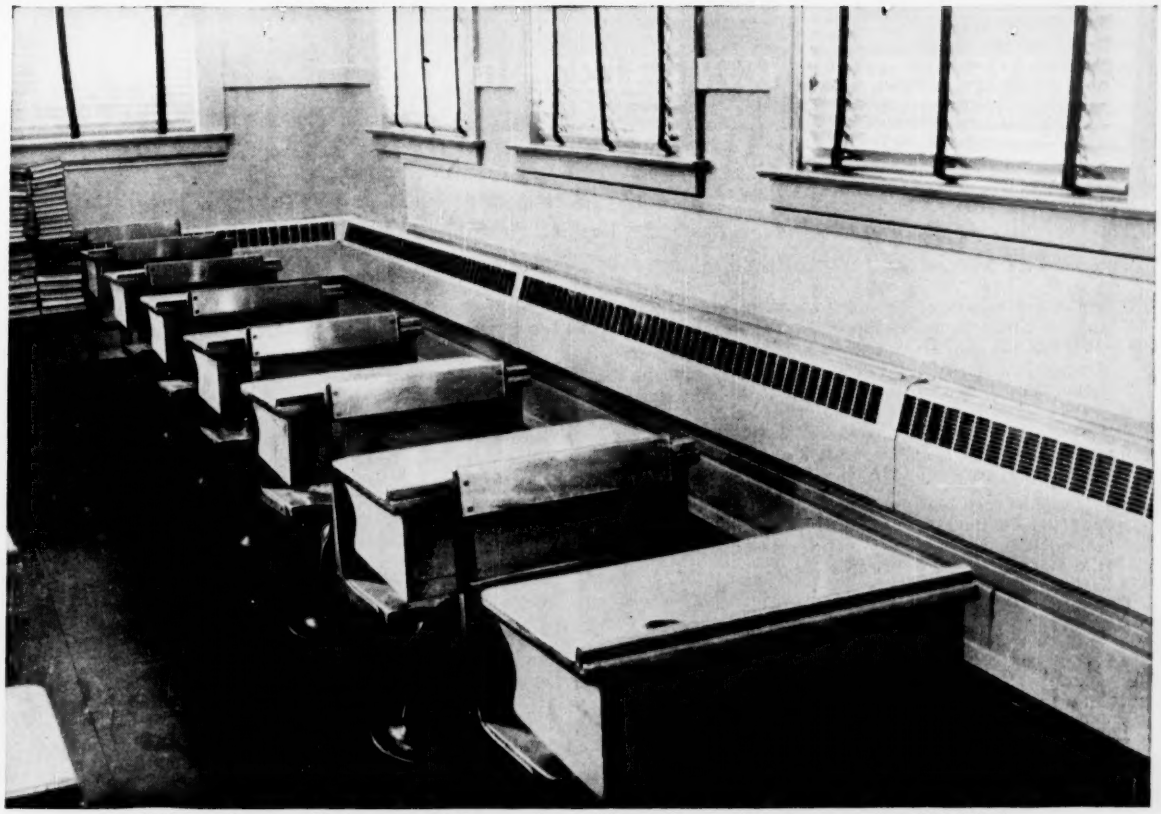

Gymnasium Dividing Nets


Tennis Nets


Field Hockey Goal Nets


Soccer Goal Nets


Basketball Nets



Webster Walvector with attractive cabinet-type enclosure adds a modern touch in classrooms of Garfield School.

New School Building from Old

Maywood, Ill. . . . Public school officials here have extended the usefulness of the old section of the 53-year-old Garfield School by comprehensive modernization. Outstanding feature was replacement of obsolete hot air system with Webster Walvector.

Rejuvenation of the old section of the Garfield School in 1951 involved such things as fresh, light-colored paint, sanitary asphalt floor tiles and modern, movable desks. These improvements would not have been long lasting with the obsolete duct-type hot air system. Hence, Webster Tru-Perimeter Heating and Webster Walvector were vital to the plan.

Here's what Joseph Lorenzo, Building Superintendent, has to say: "We like the new system very much. Heat is spread evenly along outside walls and under all the windows with a minimum of piping. It is much more economical than our old system." Webster Walvector stops down-drafts, provides gentle heat to all parts of the room, eliminates cold and hot spots.

The new heating installation has five zones. Webster Walvector was installed in all ten classrooms. Webster Convector Radiators were used in vestibules, corridors and all other rooms.

Interested in full details about Webster Walvector? Ask your local Webster Representative for Bulletin B-1551 or write us.

Address Dept. NS-12

Garfield School, Maywood Ill. Old section, built about 1900, was completely rejuvenated in 1951. Heating installation by Tropf Heating & Ventilating Co., Inc., with the approval of Charo & Charo, Architects and Engineers, school architects.

WARREN WEBSTER & COMPANY
Camden 5, N. J. Representatives in Principal U. S. Cities
In Canada, Darling Brothers, Limited, Montreal

Webster WALVECTOR
REG. U. S. PAT. OFF.
For Steam or Hot Water Heating

HERE'S CONVINCING TESTIMONY...

Pittsburgh

Controlled study of 20,000 report cards of 2,500 pupils in three Baltimore schools by leading psychologists of The Johns Hopkins University proves that planned color benefits student behavior and performance.

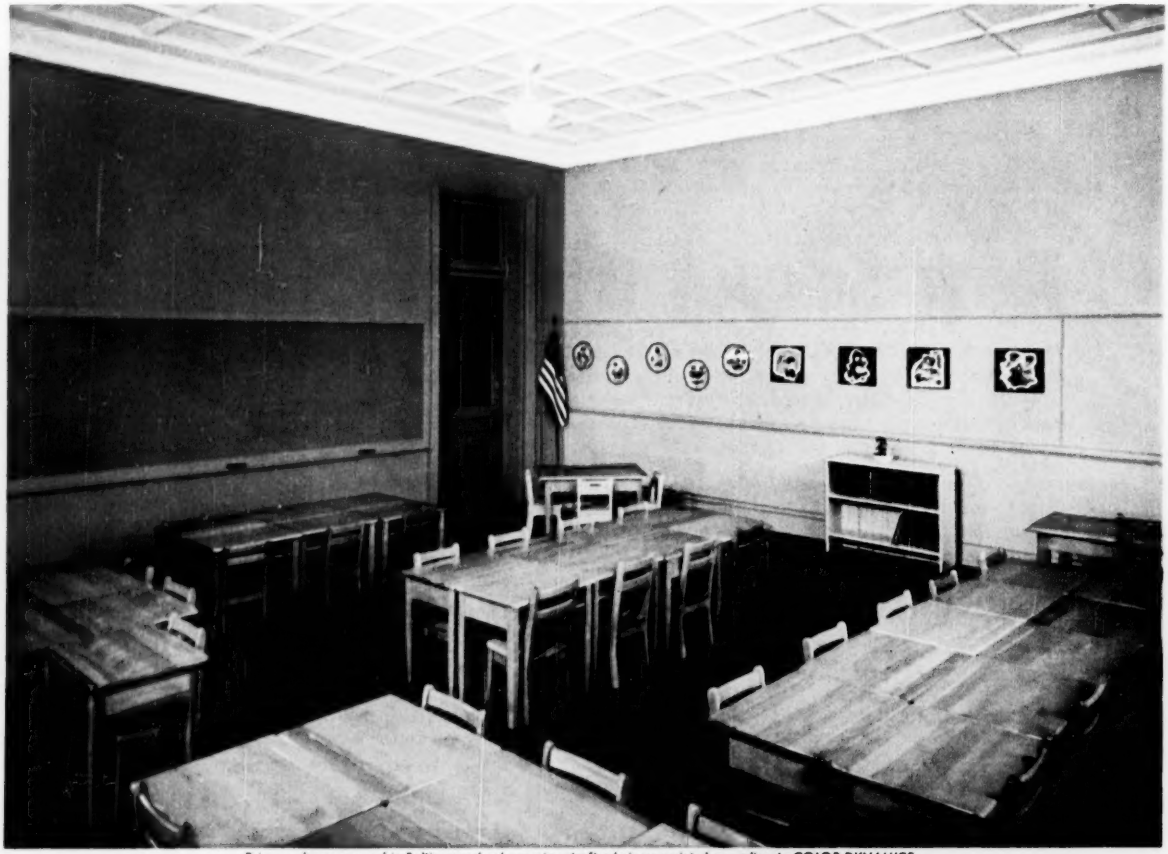
● **Planned color environment**—according to the principles of Pittsburgh COLOR DYNAMICS—definitely has favorable effects on the behavior and performance of school children. This has been convincingly demonstrated by an outstanding psychological study conducted on a large scale under actual field conditions.

This test took place over a two-year period in Baltimore elementary schools. It was made by members of the Psychological Laboratory of The Johns Hopkins University's Institute of Cooperative Research.

Three schools were included in this experiment. One school was not repainted during this test and served as the control school. Another was repainted at the end of the first year with conventional colors. The third was repainted according to COLOR DYNAMICS. Approximately 20,000 report cards of 2,500 pupils were microfilmed and analyzed during the test.

The test recorded definite improvement in behavior and scholastic traits in the school painted the COLOR DYNAMICS way. Kindergarten pupils improved 33.9 per cent over the preceding year. Next best was improvement of 7.3 per cent in the school conventionally repainted. In Grades III to VI, pupils recorded an improvement of 8.9 per cent in the COLOR DYNAMICS school. Next best was improvement of one-half of one per cent in the conventionally redecorated school.

In the light of such evidence, why not try COLOR DYNAMICS in *your* school—and see the difference proper color surroundings can make.



Primary classroom used in Baltimore school experiment after being repainted according to COLOR DYNAMICS.

PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

COLOR DYNAMICS® Improves Grades!

"These Clear Results Should Interest Every Educator,"

Say Psychologists Who Conducted Experiment!

"WE HAVE been convinced for some time that color and its dimensions (hue, value and chroma) influence human behavior. We have felt certain of the advantages to be obtained from the use of scientifically controlled color in a school environment.

"Nevertheless, we are pleasantly surprised to see such amazingly clear results come from this research, since this type of problem is difficult to handle experimentally. These positive results, we feel sure, will be of real interest to educators and all others concerned with the color design of school facilities."

TEST SHOWS STUDENTS MADE GREATEST IMPROVEMENT IN SCHOLASTIC ACHIEVEMENTS

• Examination of averages for seven performance traits of students in Grades III to VI in COLOR DYNAMICS test school shows that greatest improvement was made in traits dealing with scholastic matters.

Trait	1949-50	1950-51	Difference	% Improvement
Social Habits	3.130	3.311	.181	5.8
Health Safety Habits	3.279	3.526	.247	7.5
Work Habits	2.832	3.038	.206	7.3
Language Arts	2.645	2.922	.277	10.5
Arithmetic	2.554	2.771	.217	8.5
Social Studies	2.862	3.223	.361	12.6
Art-Music	2.976	3.274	.298	10.0

FREE—Color Engineering Study!

• We'll be glad to send you a comprehensive book explaining how to use COLOR DYNAMICS. Better still, we'll be glad to make a complete color engineering study of your school or any part of it, without obligation. Call your nearest Pittsburgh Plate Glass Company branch.

MAIL THIS COUPON TODAY

Pittsburgh Plate Glass Co.,
Paint Division
Department NS-124
Pittsburgh 22, Pa.

☐ Please send me a FREE copy of your booklet "Color Dynamics for Grade Schools, High Schools and Colleges."

☐ Please have representative call for Color Dynamics Survey without obligation on our part.

*Name*_____

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*City*_____

*County*_____ *State*_____

You'll serve yourself best in flooring with greaseproof FLEXACHROME Tile

Get flooring economy *all along the line* . . . and the kind of beauty that *lasts* . . . with Flexachrome* Vinyl Plastic-Asbestos Tile.

Yes, *dollar-saving* starts the second a Flexachrome floor is laid. This resilient tile smiles at wear in all forms . . . from shuffling feet to scraping chairs. And it isn't bothered by spilled foods, greases, acids and alkalies. Even detergents won't deter a colorful Flexachrome floor!

And, speaking of *color*, Flexachrome offers you a choice of 28 deep, clear . . . *surface to surface* . . . beauties! Primary or pastel. Solid or marbleized.

Maintenance costs go *down* with Flexachrome . . . merely needs daily sweeping to remove loose dirt, and periodic washing. *No waxing* needed unless high gloss is desired.

Repairs, if any are ever needed, are quick and easy. Replacement is limited to damaged area because of tile-at-a-time installation.

See what we mean by economy *all along the line?*

Your Tile-Tex* contractor will give you the full story about Flexachrome . . . and the other flooring products in the Tile-Tex Line. He is listed in the classified pages of your Directory. Call him today.

THE TILE-TEX DIVISION, The Flintkote Company, 1234 McKinley Street, Chicago Heights, Illinois

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*Reg. U. S. Pat. Off.

TILE-TEX... *Floors of Lasting Beauty*

KENTILE ASPHALT TILE costs less to buy –less to install

...saves you money in construction or remodeling

Low cost and economical installation are just two of durable Kentile's money-saving advantages! Kentile resists alkalis and acids...years of wear can't harm it ...colors can't wear off. Mild soap and water clean it... an occasional no-rub waxing preserves its fresh look.

Basketball and shuffleboard courts of tough Kentile are easy and economical to install in gyms and recreation rooms...actually become part of the floor itself. They never lose their crisp definition... never need painting...last for years of constant use.

Ask your architect or builder about money-saving Kentile Floors for school rooms, offices and corridors. Or, consult the Kentile Flooring Contractor listed under FLOORS in the Classified Phone Book.

Shown here is just one example of how a Kentile Floor can be used in a school room. The die-cut *Alphabet* and *Fish* ThemeTile lend modern charm and fill a necessary educational need. ThemeTile selection and prices on request.

Specifications and Technical Data

INSTALLATION: Over any smooth, firm interior surface free from spring, oil, grease and foreign matter...over metal, wood, plywood, concrete, radiant heated concrete slab, concrete in contact with the earth; on or below grade.

THICKNESSES: Kentile is available in two gauges: 1/8" for most uses–3/16" for use where extra-heavy duty flooring is needed.

SIZES: Standard tile size is 9" x 9".

SPECIAL KENTILE: Greaseproof asphalt tile for kitchens and cafeterias in a wide range of marbleized colors–extremely resistant to petroleum and cooking greases and oils, alcohols, alkalis and most acid solutions.

APPROXIMATE INSTALLED COST

The exact cost of a Kentile Floor varies according to size of area, condition of underfloor and colors chosen. For an accurate, dependable estimate, contact the Kentile Flooring Contractor listed under FLOORS in your Classified Phone Directory. He'll prove to you that Kentile is one of the most economical floors available today.

Kentile's color groupings range from Group "A," the darkest solid colors...to Group "D," the lightest marbleized colors. Special Kentile is available in Regular and DeLuxe Colors.

Samples and Technical Literature available on request. Simply write the nearest Kentile, Inc. office listed below stating the samples and information desired. And, be sure to request samples of ThemeTile die-cut inserts, colorful Feature Strip and KenBase, wall cove base.

KENTILE®

The Asphalt Tile of Enduring Beauty

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POWERS Type H THERMOSTATIC WATER MIXER

SENIOR HIGH SCHOOL AND COMMUNITY COLLEGE, Keokuk, Iowa

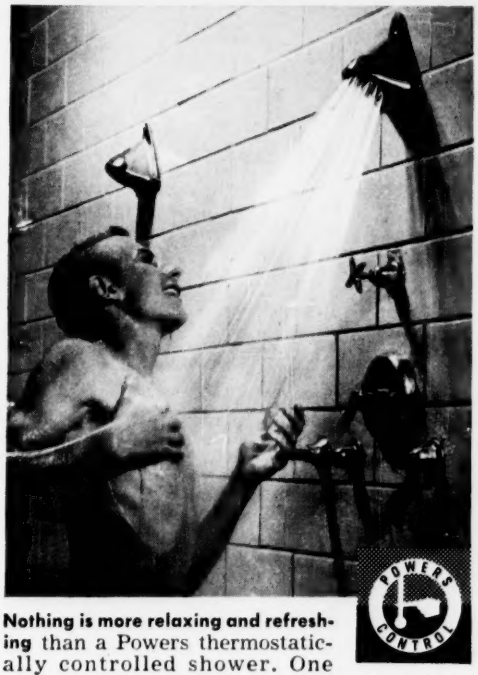
Another Prominent Powers Shower Mixer Installation

PERKINS and WILL, Architects and Engineers
E. R. GRITSCHKE, Consulting Engineer
SID SMITH & CO., Plumbing Contractor
CRANE CO., Plumbing Fixtures

Why Showers in More and More Modern Buildings Are Regulated by

POWERS

Thermostatic WATER MIXERS



Nothing is more relaxing and refreshing than a Powers thermostatically controlled shower. One shower accident can be costly in damaging publicity, personal injuries and time consuming lawsuits. Why not provide insurance against these risks? Specify and install Powers *thermostatic* mixers.

Bathers Always Get Safe, Comfortable Showers when temperature is thermostatically controlled by Powers. There's no danger of slipping and falling while trying to dodge an unexpected shot of cold or hot water.

Check these Modern Powers Features — that provide utmost safety, comfort and economy:

- ✔ Regardless of **pressure** or **temperature** changes in water supply lines . . . shower temperature remains constant wherever bather wants it
- ✔ Failure of cold water supply instantly and completely shuts off shower.
- ✔ No danger of scalding caused by "dead end" in hot water supply line. Powers mixers have a reliable **thermostatic** safety limit of 115°F. A sudden rise of 100° in hot water supply to mixer is barely noticeable by a bather in a Powers regulated shower.
- ✔ **Powers Mixers Save Water.** No time or water is wasted by bather having to get out from under shower due to fluctuating temperature. Water conservation makes them more economical.

Consult Powers on Shower Planning. For Engineering data on thermostatic control for all types of shower baths call your nearest Powers office or write us direct.

(b93)

✔ SERVICE Available in 60 Cities in the U.S.A., Canada and Mexico. See your Phone Book

Established in 1891 • THE POWERS REGULATOR COMPANY • SKOKIE, ILLINOIS

Libbey Heat-Treated Glasses

give efficient, low-cost service at the Cedars of Lebanon Hospital,

LOS ANGELES, CALIFORNIA

More than 16,000 patients a year are benefited by the most modern care and treatment facilities of the Cedars of Lebanon Hospital. In its free clinic, over 100,000 visits per year are made by patients who cannot afford private care. For its glassware service the hospital selected Libbey Heat-Treated Glasses. Are they satisfied? We think the letter shown above speaks for itself.

Libbey Heat-Treated Glasses are specially processed to stand up 3-5 times longer than ordinary tumblers under the heaviest service conditions. They take hard knocks and sterilization temperatures in stride. Through reduced breakage, you need fewer glassware replacements, smaller inventory, less storage space. And you get additional savings through Libbey's chip-resistant rims, guaranteed: "A new glass if the rim of a Libbey 'Safedge' glass ever chips."

Your Libbey Supply dealer is ready with all the details. Call him today or write Libbey Glass, Division of Owens-Illinois, Toledo 1, Ohio.

LIBBEY SAFEDGE GLASSWARE
AN (O) PRODUCT

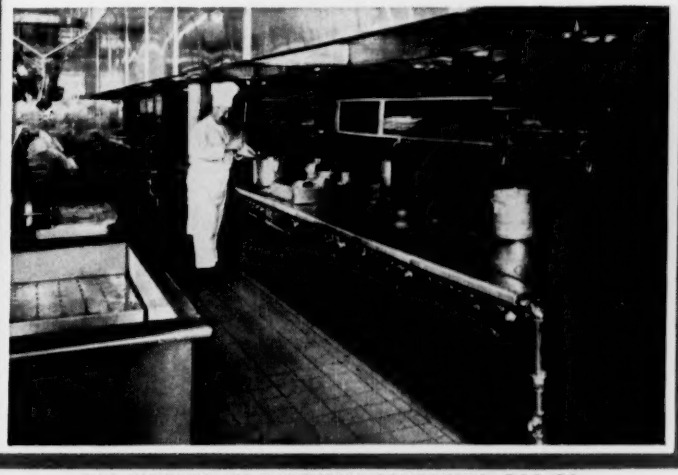
OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

TWO GREAT NAMES...

HOTEL STATLER . . . *IN LOS ANGELES*

Equipped with **GARLAND...**

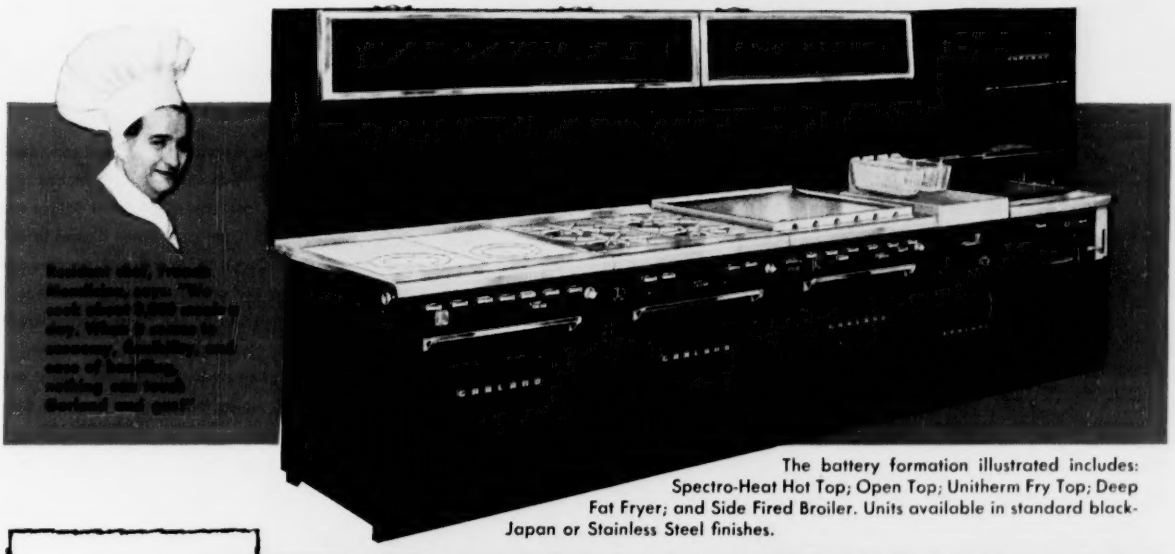
THE GREATEST NAME IN COMMERCIAL COOKING!



GARLAND CHOSEN BY NEWEST HOTEL OF FAMOUS STATLER CHAIN!

Where quality is the prime requisite of a volume cooking operation, Garland fits the bill . . . perfectly! That's one of the reasons why Garland is used in more leading restaurants, hotels, clubs, schools, and institutions than any other make! Garland's dependability, economy, and flexibility are unmatched! And it's fired by gas, the ideal fuel. See your food service equipment dealer . . . get the Garland story!

GAS SUPPLIED BY SOUTHERN CALIFORNIA GAS CO.



The battery formation illustrated includes: Spectro-Heat Hot Top; Open Top; Unitherm Fry Top; Deep Fat Fryer; and Side Fired Broiler. Units available in standard black-Japan or Stainless Steel finishes.

Look for the 45-29 Club pin . . . it's the mark of an expert!

GARLAND

DM PRODUCTS

Heavy Duty Ranges • Restaurant Ranges • Broiler-Roasters • Deep Fat Fryers
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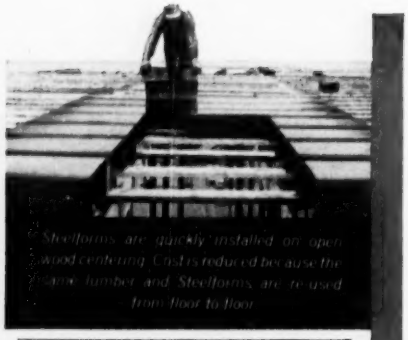
IN CANADA: GARLAND-BLODGETT LTD.—1272 Castlefield Ave., Toronto

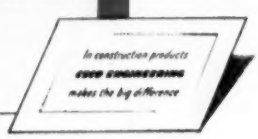
How Ceco-Meyer steelform construction cut floor weight 40%



Steelforms are quickly installed on open wood centering. Cost is reduced because the same lumber and Steelforms are re-used from floor to floor.

Shaded portions show concrete eliminated by concrete joist construction.

Ceco's rugged 1½" Intermediate Projected steel windows are made to outlast any structure. Combined weight of frame and ventilator members not less than 3.6 pounds per lineal foot.



CECO 1½" INTERMEDIATE WINDOWS PROVIDE BETTER DAYLIGHTING—OUTLAST ANY STRUCTURE

When Karl Keffer Associates, architects, designed the Charles Evans Junior High School in Ottumwa, Iowa, they faced exacting requirements:

> The structure had to provide all instructional units, plus shops, lunch room and auditorium for a minimum of 875 students . . . plus a gymnasium for a seating capacity of 4,500 . . . and this had to be done on a rigid budget.

Ceco-Meyer Steelform Construction was selected as the best way to span the 22′ to 24′ wide rooms . . . a natural choice by architects for thousands of schools. The method eliminates beams, thus allowing a flat ceiling for all rooms. Rigidity and soundproofing are provided . . . plus a saving of 40% in dead load over other types of reinforced concrete. Since Steelforms are quickly placed and removed, pouring of concrete is speeded, with weeks of construction time saved. Total cost of the Evans School was only $12.13 per sq. ft. When it came to windows, Ceco's 1½" Intermediates got the call. Heavy 1½" sections assure smooth operation and long life. Maintenance is negligible. Large glass lights provide open view . . . controlled daylighting guards pupils' eyesight. As on thousands of projects, Ceco supplied the Reinforcing Steel on schedule . . . Ceco Integrated Service brought all products to Contractors Ringland-Johnson, Inc., as needed. Result . . . a better structure . . . building budget balanced. Here is another example of Ceco performing on the Architect-Contractor-Supplier team. Ceco Product Specialists help you save through product engineering. Consult Sweet's File for address. CECO STEEL

CECO STEEL PRODUCTS CORPORATION
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Here's something to "kick around" for school applications...Westinghouse micarta

PLASTIC SURFACE

Westinghouse MICARTA® is the answer to the question that has plagued school boards, builders and architects ever since the first braid was dipped into the first inkwell. Namely . . . "Where can we get a material that will hold up under generations of marching, kicking, scuffing students?"

This amazingly tough and versatile decorative plastic can be wiped clean in a matter of seconds. It eliminates the annual problem of refinishing and painting, stays bright and attractive even under assaults by mild acids, hot liquids, alkalis, and cosmetics.

In addition to wainscoting applications, MICARTA serves well on counter tops, cafeteria tables, school desks, cabinets... in fact, wherever there's a need for a long-lasting combination of utility and beauty! You can specify Westinghouse MICARTA with complete confidence.

For complete information call your nearest United States Plywood Corporation Representative or fill out the coupon below. J-06545

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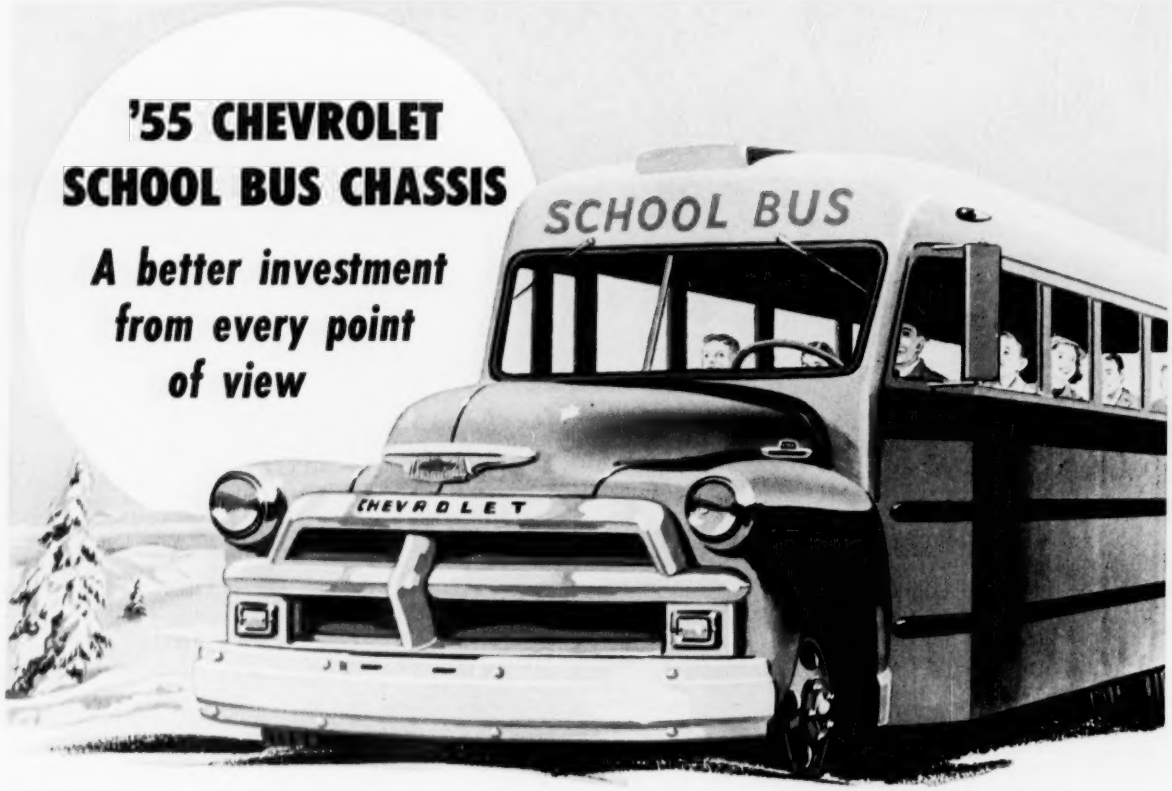
NS-12-54

'55 CHEVROLET SCHOOL BUS CHASSIS

A better investment from every point of view



Naturally, your first concern is the safety of your school bus passengers.

On that score, we point to the extra strength and ruggedness that's been engineered into every Chevrolet school bus chassis. No doubt about it, there's definitely extra passenger protection provided in Chevrolet's strong, rigid frames. There's an extra measure of protection in engine power that provides acceleration and hill-climbing ability to spare . . . with fine all-around performance.

Economy and dependability are other important considerations. Here again, the Chevrolet school bus chassis will prove your soundest investment over the years. We suggest you get in touch with your Chevrolet dealer for complete details. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

MODEL 6802 212-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. For School Bus bodies of 48- to 54-pupil capacity. Chevrolet "Loadmaster 235" valve-in-head engine,* 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes: Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

MODEL 6702 199-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 13,500 or 16,000 pounds, depending on tire equipment. For School Bus bodies of 42- to 48-pupil capacity. Chevrolet "Loadmaster 235" valve-in-head engine,* 200 foot-pounds torque (pulling power) at speeds governed under 35 m.p.h. Heavy-duty brakes: Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

MODEL 4502 161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. For School Bus bodies of 30- to 36-pupil capacity, depending on tire equipment. "Thriftmaster 235" engine, 200 foot-pounds torque (pulling power) under 35 m.p.h. governed speed. Heavy-duty brakes: Torque-Action, front; Twin-Action, rear; Dual-Shoe, parking.

MODEL 3802 137-INCH WHEELBASE JUNIOR SCHOOL BUS CHASSIS

Gross vehicle weight, 7600 pounds. For School Bus bodies of 16-pupil capacity. Chevrolet "Thriftmaster 235" valve-in-head engine, 200 foot-pounds torque (pulling power) under 35 m.p.h. Torque-Action brakes front and rear.

"Jobmaster 261" engine, optional at extra cost, develops 220 foot-pounds torque at speeds governed under 35 m.p.h.

There's a Chevrolet School Bus Chassis to meet your school transportation needs

CHEVROLET

THE ROOF of the new Walnut Grove School, West Mifflin Borough, Allegheny County, Pa., is USS Stainless Steel. Architects: Button and McLean, Pittsburgh, Pa. Contractor: Nicholas LeDonne, Clairton, Pa. Roofing contractor: Limbach Company, Pittsburgh.

New Walnut Grove School has a maintenance-free roof of Stainless Steel

● The school board of West Mifflin Borough, Allegheny County, Pennsylvania, took care of roof maintenance almost permanently when the new Walnut Grove School was built. They did it by specifying a roof of long-lasting USS Stainless Steel.

The roof is approximately 385 feet long and 75 feet wide. The Stainless Steel roofing panels have a satin-type architectural finish. They are of 26-gage material fabricated into a standing seam panel 27⅜" wide by 12 feet long.

Stainless Steel's superior corrosion resistance, combined with its almost complete freedom from maintenance, fits it for years and years of satisfactory service. It has excellent reflective properties, and features needed strength with light weight.

The Stainless Steel roofing sheets are laid on double-coated, 35 pound asbestos felt. Each cross seam is caulked and the roofing is locked into the Stainless Steel gutter. Gutters and downspouts are of 22-gage Stainless Steel, architectural finish.

In addition, all attachments, supports, hanger bars, bolts and screws are Stainless Steel.

Stainless Steel is finding wide favor with school architects, not only for roofing, but for exterior walls as well, when used in the form of insulated panels. Of course, its wonderful possibilities for interior trim are also being used to advantage.

If you have a new school in the planning stage, now is the time to think in terms of Stainless Steel and its many benefits. And think in terms of perfected, service-tested USS Stainless Steel. For more information, mail the coupon below. If you like, we will be pleased to have one of our representatives call.

INSTALLING the standing seam USS Stainless Steel roof on the new Walnut Grove School. The roof was laid on double-coated asbestos felt with each cross seam carefully caulked before the upper sheet was installed.

United States Steel Corporation
Room 4561, 525 William Penn Place
Pittsburgh 30, Pa.

Please send me information on architectural use of Stainless Steel.

Name ..... Title .....

Address .....

City ..... State .....

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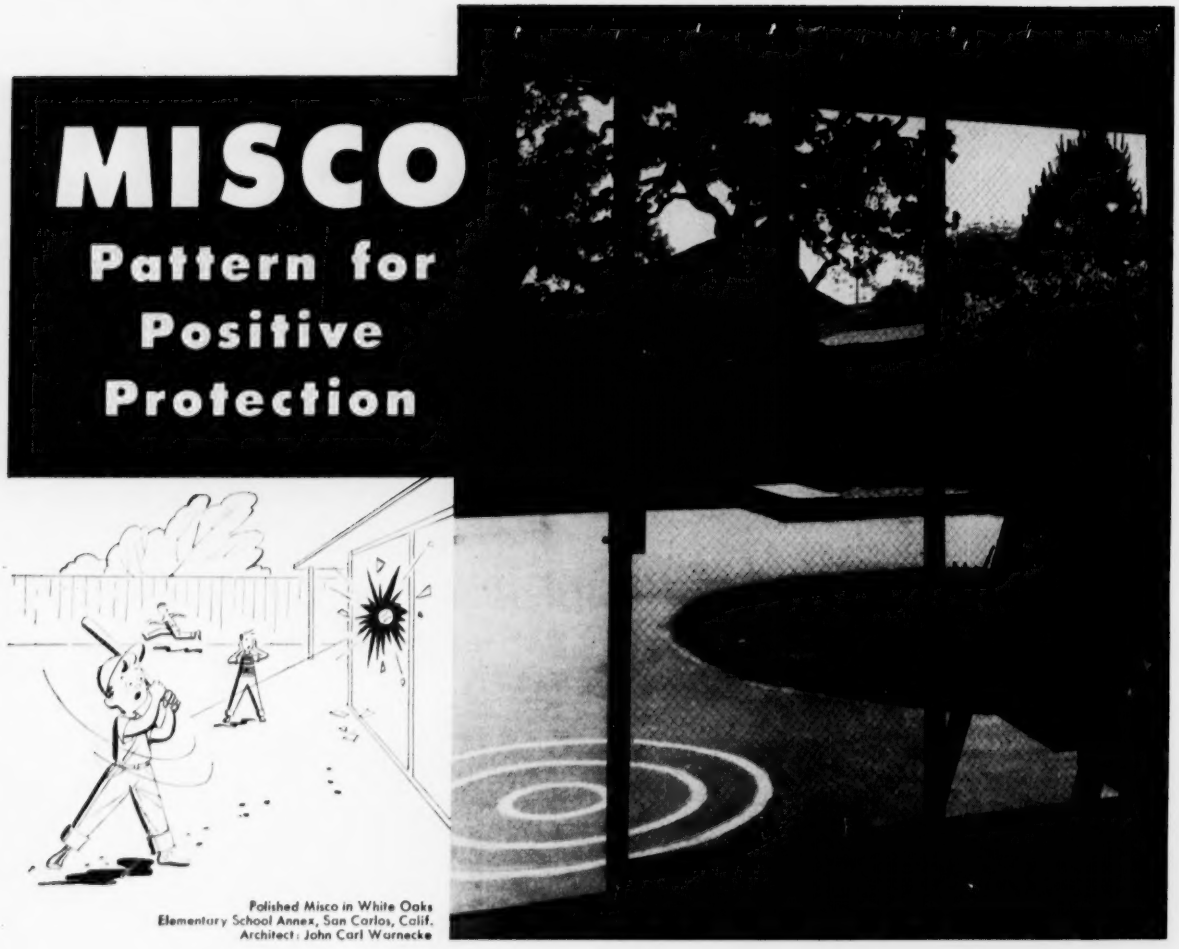

Polished Misco in White Oaks Elementary School Annex, San Carlos, Calif. Architect: John Carl Warnecke

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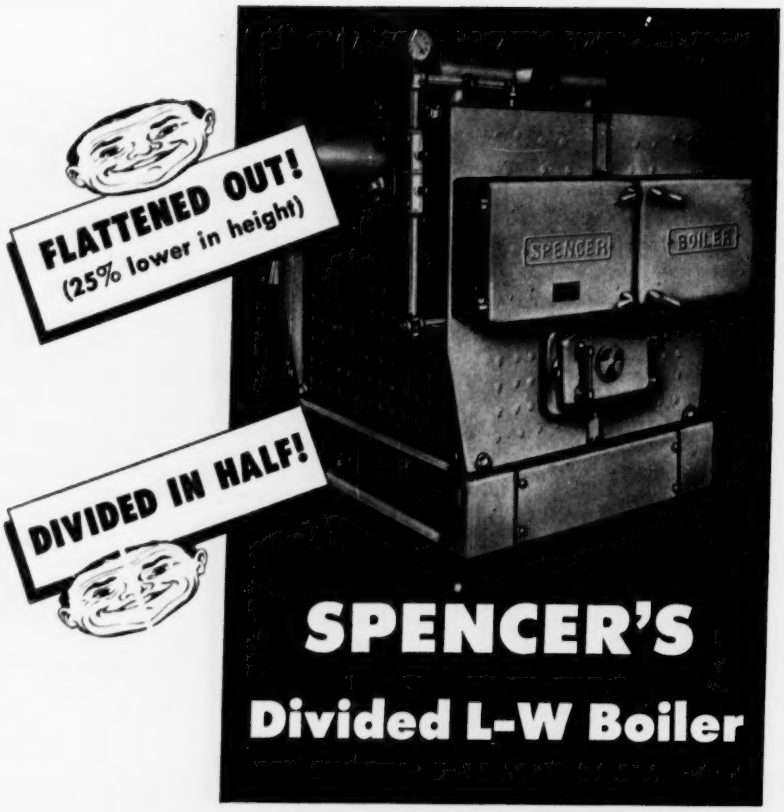

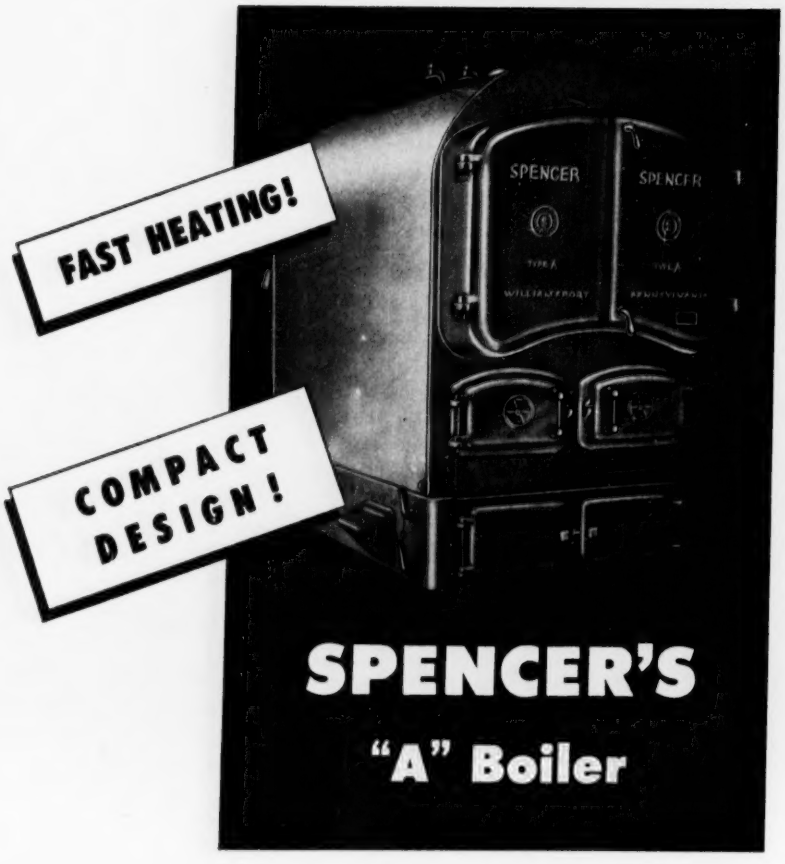

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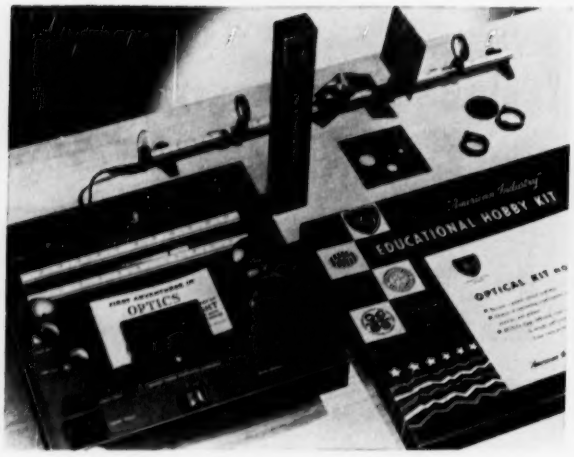

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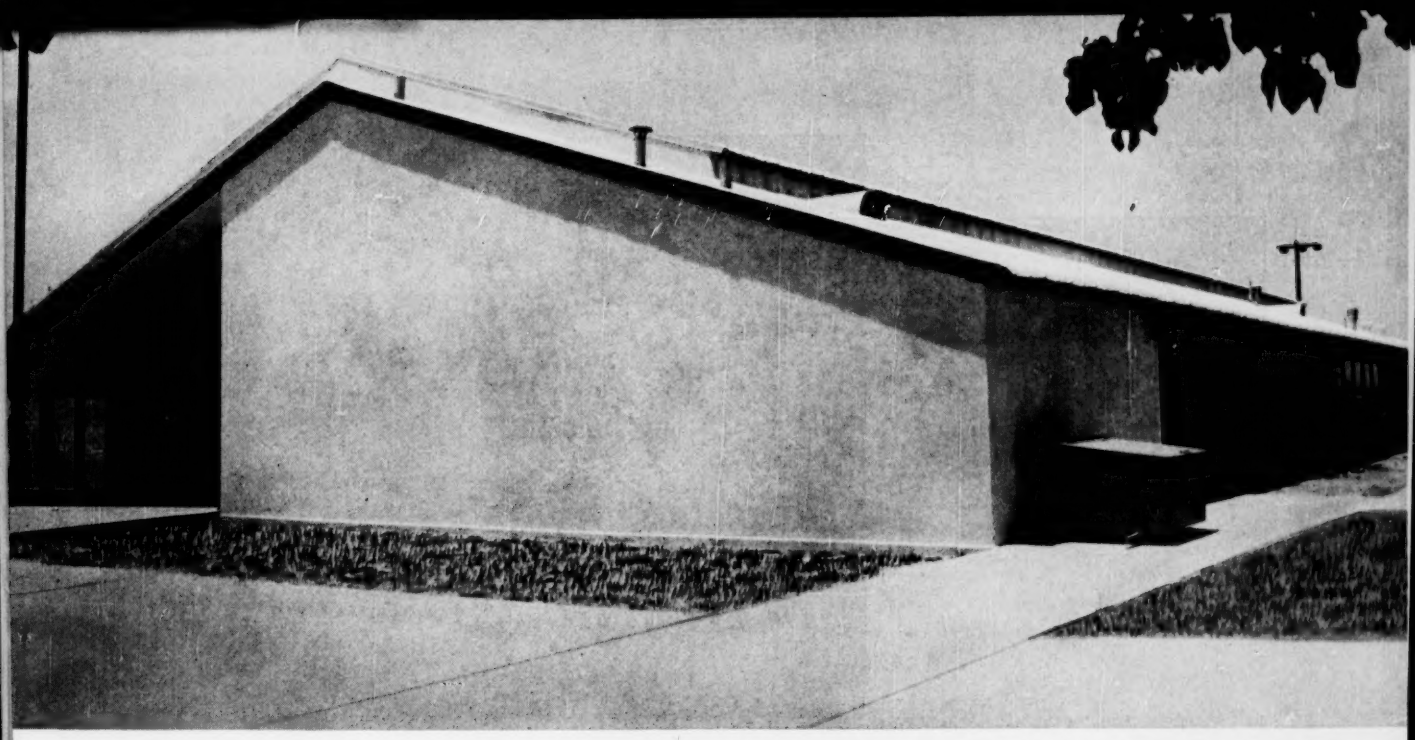
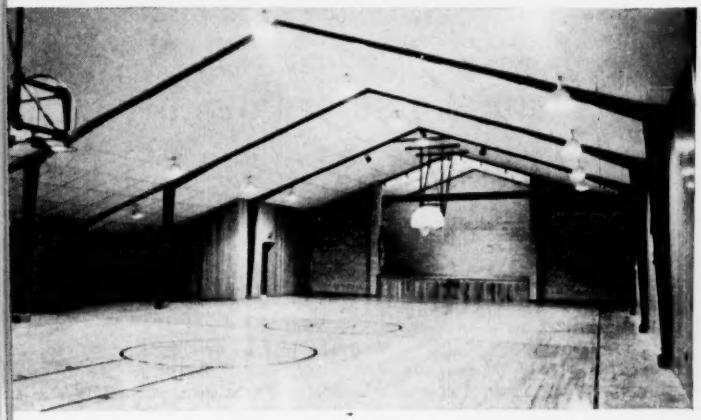
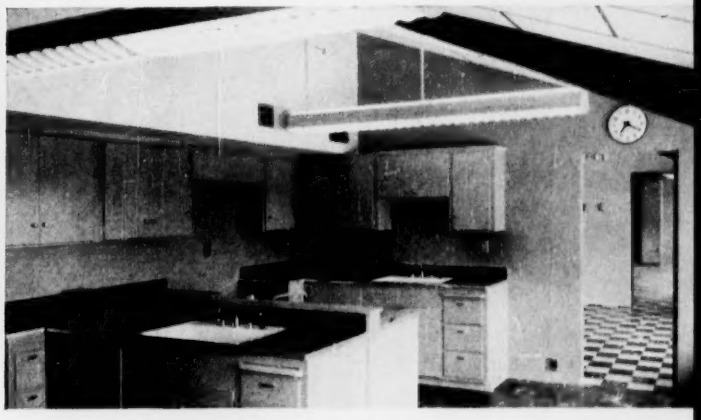




Interiors of Butler steel buildings permit most effective use of space. Note, easy-to-install insulation and space for portable bleachers.



Modern, sanitary kitchen shows adaptability and flexibility of Butler buildings. Here pupils are taught practical home economics.

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Cincinnati, Ohio

Architects:
Harry Hake and Harry Hake Jr.
Joseph M. Lyle Associate

Acoustical Contractor:
Cincinnati Floor Co.

Strict sanitary standards and high sound absorption were requirements of ceilings in the school's cafeteria. Armstrong Arrestone offered both features, as well as complete incombustibility — which contributes to the school's fire-safety.

The Travertone ceiling quiets sound bouncing off hard surfaced terrazzo pillars, glazed tile walls, and marble floors before it can become distracting noise. Attractive as well as efficient, Travertone's white-paint finish can be easily washed or repainted.

School avoids noise problems with three different ceilings

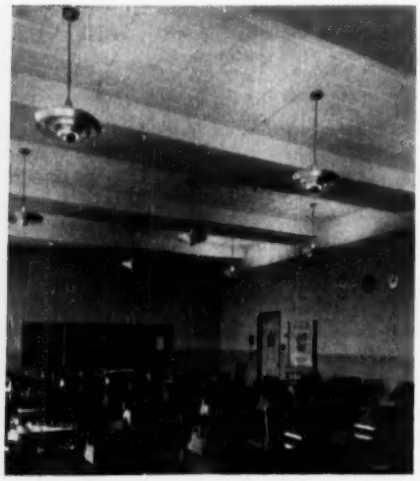
Specific needs for appearance, economy, and fire-safety prompted the use of three different acoustical materials to sound condition Cincinnati's Central High School.

Economy was as important as noise-muffling efficiency in selecting an acoustical material for large ceiling areas in the classrooms and gymnasium. Armstrong Cushiontone® offered both features. Low in both first and maintenance costs, Cushiontone absorbs up to 75% of the noise that strikes it.

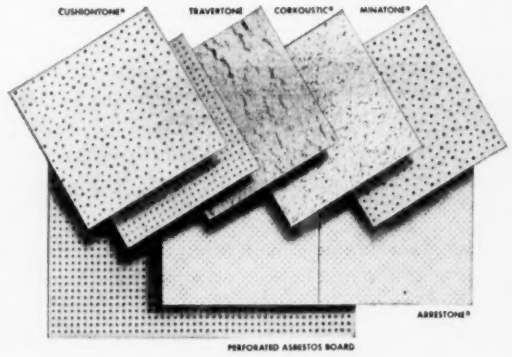
In the lobby, where both appearance and fire-safety were important, Armstrong Travertone* was the natural choice. Travertone's fissured surface blends well with the travertine marble floors, while its mineral wool composition meets all fire codes.

Fire regulations, plus the need for an exceptionally efficient noise-muffler, suggested the use of Armstrong Arrestone® in the corridors and cafeteria. This metal-pan material is incombustible and absorbs up to 85% of the sound that strikes its surface. Easy upkeep and high resistance to moisture were other reasons for choosing it for the cafeteria.

For full details on all Armstrong sound-conditioning materials, see your Armstrong acoustical contractor. For the free booklet, "How to Select an Acoustical Material," write Armstrong Cork Company, 4212 Wabank Avenue, Lancaster, Pennsylvania. *Trade-mark



Low in both material and installation costs, Cushiontone is reasonably priced to meet strict budget requirements. Cushiontone's attractive white-paint finish reflects light evenly without annoying glare. It's easy to maintain, too.



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ALSO SKYTROL® AND FOAMGLAS®
* PC Trade Mark

Architects: Lamont H. Button and Paul F. McLean · AIA · Pittsburgh, Pa.

"I've never seen a school with better daylighting,"

says **Thomas J. Kelly, Ed.D.,** *Superintendent of Schools*
West Mifflin Borough, Pa.

Look at West Mifflin Borough if you want to see a fast growing community. The population is expected to *triple* in the next ten years. The borough is facing this problem head-on, with a fast-stepping school building program.

Latest school to be put into service is the Edison Junior High School shown here. This is a *complete* school plant, with cafeteria, 600-seat auditorium, many special purpose rooms and a fully-equipped health suite for medical, dental and audiometric examinations.

But when you see the school and enter it, the first thing you notice is the superb daylighting made possible with PC Glass Blocks. After the school was erected, complete light distribution readings were taken and compared to other nearby schools. In the words of Dr. Kelly, "There was an amazing difference between the daylighting in this school and the others. We'll stack it up against any other school."

How about future plans? Dr. Kelly says, "We intend to continue the use of glass blocks for new schools and the remodeling of old ones, because they do promote the visual climate we want for children. Equally important is the low maintenance. We have had no breakage, and the custodian can wash the panels with a garden hose."

Do you want these advantages in your new schools? Ask your architect for more information or write Pittsburgh Corning Corporation, Dept. AK-124, One Gateway Center, Pittsburgh 22, Pa.

PC Glass Blocks

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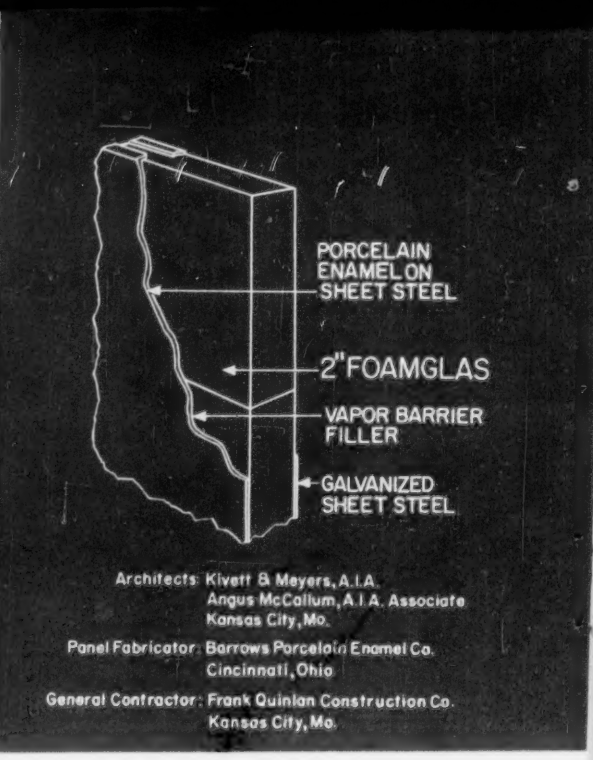

Architects: Kivett & Meyers, A.I.A.
Angus McCallum, A.I.A. Associate
Kansas City, Mo.

Panel Fabricator: Barrows Porcelain Enamel Co.
Cincinnati, Ohio

General Contractor: Frank Quinlan Construction Co.
Kansas City, Mo.

Lightweight, waterproof FOAMGLAS proved ideal insulation for curtain wall panels at Douglass Elementary School, Kansas City, Mo.

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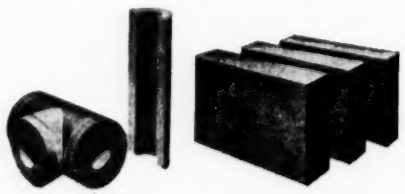

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Pittsburgh Corning also makes PC Glass Blocks

THE
NATION'S
SCHOOLS
DECEMBER 1954

Looking Forward

Joint Fight for Freedom

THE major issue in American education today is to keep schools and colleges free from political, intellectual and economic dictation." This warning comes from Palmer Hoyt, editor and publisher of one of this nation's most courageous newspapers, the *Denver Post.*

Addressing California administrators at their annual convention in Long Beach, October 20, Editor Hoyt urged the schoolmen to continue their fight for that freedom because, he said, "it is fundamental to our country." In this fight, schools should have an ally in the newspaper, believes the Denver editor.

"Journalism and education have a great deal in common," he said. "Both serve the same fundamental right, namely, the people's right to know."

School Architecture Contests

IS SCHOOL architecture improved by contests? Does competitive judging of plans for new school buildings really make sense?

Or is competition of this nature contrary to the professional ethics of architecture and detrimental to the best interests of educational planning?

Ordinarily, one does not think of the major professions as being engaged in contests. Doctors do not hold surgical marathons to decide who can perform the best appendectomy. Teachers do not hold demonstrations to prove which one does the best teaching. Clergymen do not expect blue ribbons for saving souls.

The service of an architect is a professional relationship with his client—the school board. The measure of his professional service depends upon how well he serves the needs and the wishes of his client.

There are individual differences among school communities just as there are among children. The school plant that is ideally suited for Grandville may be completely inappropriate for Colossal City. Each community differs, not only in its ability to pay for a school building but also in its relative emphasis on a vocational or academic program, upon a sensible or fanatic support of high school athletics, and in many other ways.

Upon what criteria, then, are school plans by one architect presumed to be better than those by another?

If the architect is serving the best interests of the community that hired him, the plans he has made for the new school must be judged upon how well the proposed plant will facilitate a specific instructional program. Until such time as school administration develops and provides comprehensive *educational* specifications for each new school plant, there is and will be no valid method of determining how well the architect has served his client.

For instance, Community A wants a great deal of varsity and intramural athletic competition. Therefore it insists upon having a big gymnasium, field house, and football stadium. And the architect plans the school plant accordingly.

But Community B thinks outdoor physical education can take the place of much instruction that is traditionally housed in a gymnasium. It believes in self-contained classrooms and sees no need for a large number of special rooms. This new school plant would differ in many ways from the plans for Community A.

How, then, does one decide which is the better example of school architecture?

To be sure, a few features of school architecture can be judged universally, but even these are more limited than may at first appear. The building, shall we say, must be well lighted. But can architects or lighting experts or educators agree as to what constitutes a well lighted room? One architect experiments with toplighting. Another favors light-directing glass block. A third uses ceiling-to-floor glass fenestration. One uses bilateral lighting; another shuns it.

Or one architect favors radiant heating; another detests it. One uses classroom units for heating and ventilating. Another insists that the building must have a central system of heating and ventilation.

Experts who have given a lifetime of study and experimentation to these problems often disagree,

sometimes violently, as to the best methods of providing the most suitable physical environment for the classroom. How, then, can any jury of three or five persons say positively that one school plant design is better than the next one?

Often, too, the selection of materials to be used in the building may be influenced by the availability of supplies indigenous to that community: as, for example, redwood in California. Or the selection of materials may be determined by a desire to have the school building resemble somewhat the houses in the community: as, for example, the use of native stone or a locally manufactured brick.

Neither is the merit of the product to be judged in terms of the cost per square foot, per cubic foot, per pupil, or per classroom (even assuming that there is agreement on the manner in which such costs shall be computed). Unit costs vary from region to region because of differences in labor costs and building materials, and even because of fluctuation in bidding during various seasons of the year.

Another variable from city to city and from state to state is the handicap placed upon the architect by building codes and sometimes, unfortunately, by legal restrictions incorporated in the distribution of state aid for schoolhouse construction (California, for example). An architectural feature that might bring a plus mark or a high rating in plans for a school building in Region A might be completely illegal or disapproved in Region B. Is the architect, therefore, to be marked down on his plans because he obeyed the law in Region B?

The real test of any new school building is made by pupils and teachers when they start living in it. Automobile manufacturers will testify that, after all of their laboratory research and testing, it is the customer who finds the "bugs" in a new car. Similarly, some mistakes of school designing do not appear until the school is occupied. Yet such mistakes are seldom (or are they ever?) admitted by the architect or the school superintendent.

Does all this imply that exhibits have no merit, or that comparisons should not be made between characteristics of various types of school plant plans? Quite the contrary. Exhibits of school plans and models are extremely valuable to show the kind of buildings that other communities are planning. Comparisons and criticisms of the designs can be most helpful, especially if such comparisons can be related to the manner in which the school plant meets the specific needs of the instructional program.

At best, a jury's decision can represent only the opinions of the majority of the individuals composing the panel. Such opinions are valuable as a means of information to other school architects and administrators, notably if they point out trends and regional adaptations. But the awarding of prizes implies endorsement by the architectural profession of practices in design and structure that actually are quite controversial today. Such awards also assume that educators have agreed upon definite patterns for the distribution of learning space and the provision of instructional facilities in the modern school plant.

Any architectural contest that is based upon a *single set* of specifications can be judged objectively. But that's a different story. Education is not a regimented, standardized national process in this country. Moreover, many educators disapprove the use of extrinsic rewards to motivate learning in the classroom. To them, giving awards to "motivate" school architecture must seem quite illogical.

The NATION'S SCHOOLS does not believe that competitive judging of school building plans is consistent with the ethics of professional service for the architect. Neither do we believe that the rating of school plant designs on a contest basis is consistent with the unique nature of community-rooted public education.

Dubious Honor

WHEN the board of education decides to name its new building after its president—or in honor of any other member of the board—what can the conscientious school superintendent do about it?

It may well be that the board president has served the community well, long and faithfully. But it also could be that he has been on the board far too long, has used the position to increase his own prestige and power, and is no more deserving of the honor than are hundreds of other citizens in the community.

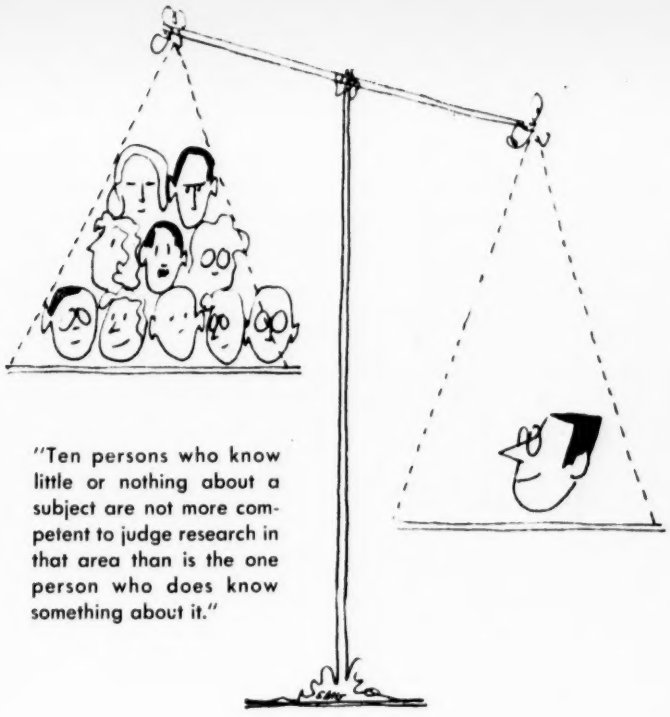
We think that a modest, truly civic-minded citizen —be he board member or not—would decline the honor of having any public building named after him. (It's too much to hope that politicians would feel that way.)

Why does any man with a modicum of common sense want to put himself in a strait jacket for the remainder of his life? If a public building bears his name, he is now on a pedestal. He may do nothing that would invite criticism. In fact, his life is no longer his own.

It's doubly unforgivable to find buildings named after the school administrator. How embarrassing it must be for a superintendent to go back to the community that named a school after him and later fired him. These things do happen!

Does this mean that no building should be named after a living citizen? Not necessarily. When the career of a board member, superintendent, teacher or any other citizen has been concluded and the public has had ample opportunity to evaluate the influence of his life on the generations to come, then and only then can the board and the community decide.

The Editor



"Ten persons who know little or nothing about a subject are not more competent to judge research in that area than is the one person who does know something about it."

Faculty participation? Yes . . . . . but

COLLECTIVISM IS *NOT* DEMOCRACY

ERNEST O. MELBY
Dean, School of Education
New York University

FOR approximately three decades administrators and students of administration have been talking and writing about the democratization of educational administration. This much discussed democratization of administration has in many ways been a revolt against overcentralized and sometimes arbitrary practices on the part of administrators. From another point of view it has also constituted a rather determined effort on the part of teachers on all levels of education to wrest power away from administrative officers such as principals, superintendents, deans and presidents.

While there have been many difficulties and much confusion of terms, there can be little question that recent decades have introduced far more teacher-faculty participation in many aspects of the administrative process. We have thus had enough experience with various group processes applied to educational administration that it may be worth while to attempt a rough appraisal of the outcomes.

Under the older patterns of administration a great part of the initiative for educational change rested with the superintendent, the principal, the dean, or the president. Under more recent processes a good deal of this initiative has passed over to teacher groups, faculties and faculty committees. Such faculty groups guard their control of the educational program with zealous concern. Where a quarter of a century ago faculty groups were fighting administrators in an effort to free themselves to carry on educational innovations, they may today oppose changes in the educational program and become a powerful force for the retention of the educational status quo. It would appear that, insofar as control of educational programs is concerned, faculty members are no more inclined to develop innovations than were the administrators they have removed from seats of power in the past few decades.

POWER BRINGS CONSERVATISM?

It is, of course, not easy to appraise this situation or to examine accurately the various motivations involved. Is it the power teachers have exercised which causes them to be conservative in their participation in the deliberative processes through which they exercise control? In other words, has the possession of power in the determination of policies had the same effect on teachers that it allegedly had earlier on the administrators who then wielded the power?

Control of educational programs by faculties has in any case given us a new problem. Whatever drawbacks were attached to administrative control, it must be said that the administrator tended to view the educational problems involved from a somewhat general point of view. He was almost in the very nature of things forced to consider the problems confronting him from a broad over-all institutional point of view.

Overspecialization has, of course, characterized the training of teachers and faculty members even more than it has that of administrators. The result is that the transfer of educational control from administrators to teachers has in many instances placed control in the hands of narrow specialists. I am fully aware of the need for specialization and of the importance of the contributions of the specialist, but no matter how sympathetic one may be to the needs for specialization one cannot ignore the difficulties that arise when a group of specialists begins to determine broad educational policies. The specialist tends to develop those educational programs which further his specialties rather than those which contribute to well rounded personality growth on the part of the student. Then, too, the needs of his specialty rather than the needs of society tend to predominate.

The increase in the amount of faculty control has tended to operate in the making of schedules and in the selection of courses and other educational arrangements. In many public school systems there is a growing tendency for faculty members to resist extracurricular activities in out-of-school hours. In one school system it is extremely difficult to hold any teachers meetings or workshops after 3 o'clock in the afternoon because a large proportion of the teachers are married women who must get home immediately after 3 o'clock to manage their households. Thus leadership activities and school programs must be built around the home duties of a large proportion of the teachers rather than in terms of the needs of the pupils.

GREATEST PROBLEM

Perhaps the greatest single problem in an educational enterprise with a large amount of faculty participation in administration arises in connection with the creative or liberative function. Faculties tend to solve their problems through the process of legislation. Their usual response to a difficulty is to make a new rule or establish a new regulation. When they make these rules and regulations they are not aware of the degree to which they themselves will be hamstrung. It is only after a large number of rules accumulate that teachers begin to find these rules to be an oppressive millstone around their necks. Even then they hesitate to alter the rules for fear that somehow in the process they will lose control over some facets of their sphere of activities. In other words, they tend to endure oppression rather than to take action which in their view may somewhat challenge their control.

In public school systems, and especially in universities, service on committees is coming to absorb an extraordinary amount of the time of faculty members. Often the committees overlap in sphere of activities. In other instances they tend to assume administrative as well as policy making functions. It may sound like an anachronism, but there is strong ground for the belief that the more "democratic" the administration of colleges and universities has become the less freedom there is for the individual faculty member.

If a school is to be truly democratic it must help each teacher and each student to become all he is capable of becoming. In other words, in a truly democratic school there must be freedom for both students and faculty members. This means freedom to explore new ideas, to teach new courses, to participate in experimental efforts, and to join with one's associates in creative endeavor. When I was a faculty member at the University of Minnesota in the Twenties all I had to do to get permission to carry on an experiment was to go to the dean's office and ask. Almost invariably I got permission to do what I wanted to do. I could set out immediately to plan my experiment or my study and use whatever energy I had on the project itself.

In a great many institutions today the young faculty member who wants to do anything new or different must present it to one of the many committees of the faculty. Six months later, even if he is lucky enough to obtain approval of his project, he will have worn out so much of his energy in the process of getting permission to move forward that he may have little zest for the project or it may be that the amount of time consumed is so great that in the meantime he has thought of a new and better idea. In that case he will have to start all over again with this laborious process.

LIBERATION FOR CREATIVE EFFORT

Observation of this sort of thing has convinced me that while groups can do a great deal that is significant in policy determination they do not often liberate individual faculty members for creative efforts. Liberation for creative efforts is a function that must be performed by some individual. It is, it seems to me, a clear responsibility and an obligation of administration.

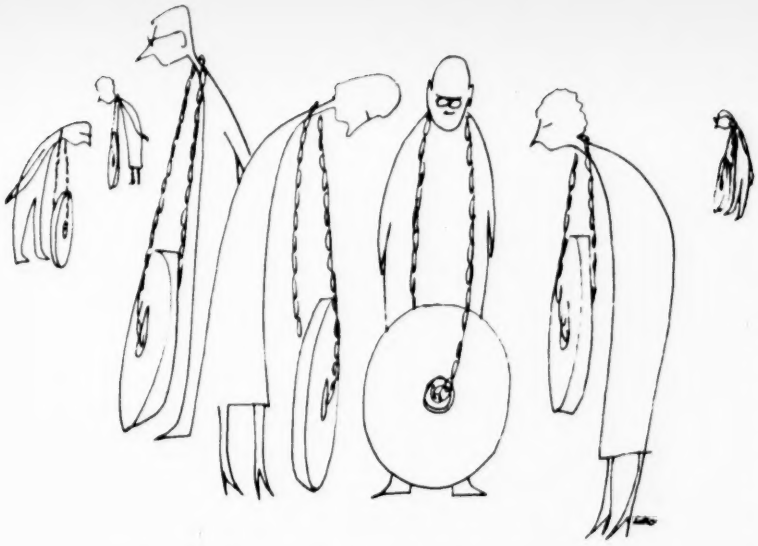
Administrators should be selected because they know how to say Yes and not because they are in the habit of saying No. It is their special responsibility to see that there is a creative tone to the educational enterprise. They should do all in their power to create stimuli for creative effort. Their work should give to the enterprise a definite and vigorous forward thrust. They should be in constant search for new ideas. It is their responsibility to scan the educational horizon and to make suggestions for research, curriculum development, and educational programs which will prepare the institution to meet new conditions. These are also, of course, the responsibilities of faculties, but it is difficult for the faculty acting as a group to liberate the individual staff member.

The difficulty with much of our effort in the direction of the democratization of educational administration is that we have borrowed the technics of political democracy and applied them to a scientific and educational endeavor. We fail to sense that the academic world is not an exact parallel for a political community. Politics moves on the basis of compromise, but in the field of science compromise leads us nowhere except to confusion and untruth. The creative artist whether he works on a canvas with a brush or in the laboratory with a test tube or in the classroom with boys and girls and men and women must be seeking the truth. He must be free to seek the truth as he sees it and not be subject to the restrictions arrived at through political compromise.

Faculty participation may have given teachers a sense that they control the enterprise, but it has not in many instances liberated them individually for creative effort. This liberation of the staff member for creative efforts (both individually and in collaboration with his associates) seems to me to be the central problem of administration today. No matter how many outward trappings of democratic action an administrative setup may have, it will not meet our requirements if its effect is to bog individual teachers down with unnecessarily time consuming details and if it confronts them with rules and regulations that frustrate them when they attempt something creative.

COLLECTIVIST PROCEDURE

It would seem that in many cases democracy in administration has degenerated into a collectivist procedure rather than a truly democratic process. For one thing we should beware of any procedure that holds that *everybody must do everything*. Division of labor and responsibility is not inherently undemocratic. Somebody must be trained to become the kind of person who can make decisions on the creative front. The man who has moved furthest out on the frontier in any field of knowledge is the one best fitted to decide what further efforts can be made on this frontier to good advantage. He should not be held back by the political decision of those who have not been on his frontier but who are viewing his research activities through



"It is only after a large number of rules accumulate that teachers begin to find these rules to be an oppressive millstone around their necks. Even then they hesitate to alter the rules for fear that somehow in the process they will lose control over some facets of their sphere of activities."

the pessimisms of their own individual limitations.

In the distribution of research funds I would invest in people rather than seek to pass judgment myself on the promise of proposed research in a field in which I know nothing or at least very little. Similarly I would free the educational adviser of the Ph.D. candidates from the rules and regulations of faculties, outline committees, and the like. Ten persons who know little or nothing about a subject are not more competent to judge research in that area than is the one person who does know something about the field of knowledge.

For one thing, in our efforts at the democratization of educational administration we vote too frequently, and we vote on matters that are too detailed in character. When we vote as a faculty we tend to approach the lower limit of acceptability in the realm of ideas. In other words, what an entire faculty will agree to is something that is nowhere near the frontier of educational thought or creative efforts. If then our vote becomes binding upon the group as a whole the most vigorous and creative spirits will inevitably be held back by the immaturity of the group as a whole.

CREATIVE ADMINISTRATION

Nothing in this statement should be taken to mean that we should turn to autocratic administrative attitudes or procedures or that there is not an appropriate rôle for faculty participation in administration. Far from it On the contrary we must study the rôles of faculty members and administrators carefully, realizing that creative administration is an undertaking in which faculty members and administrators must both share and in which each must discharge certain responsibilities that must be met in terms of clear-cut objectives and favorable conditions for creative effort. Both groups must remember that freedom for creative effort is the most precious element in the administrative process. Both must have respect for personality, and human relationships must be based upon confidence, faith and understanding. Both groups must be dedicated to their search for truth. All must feel that they are co-workers and not involved in a kind of educational cold war.

MANY FUNCTIONS

On all sides it must be recognized that there are many different functions that must somehow be performed. There is a teaching function, a research function. The administrator is or should be a trained leader. He is or should be selected because he has the capacity to stimulate creative effort and to create conditions of rapport and understanding among people. The administrator should be an expert on the release of creative talent in faculty members and students alike. If faculty members and administrators study these problems they can develop educational administration that is creative in quality, democratic in spirit, and effective in action.

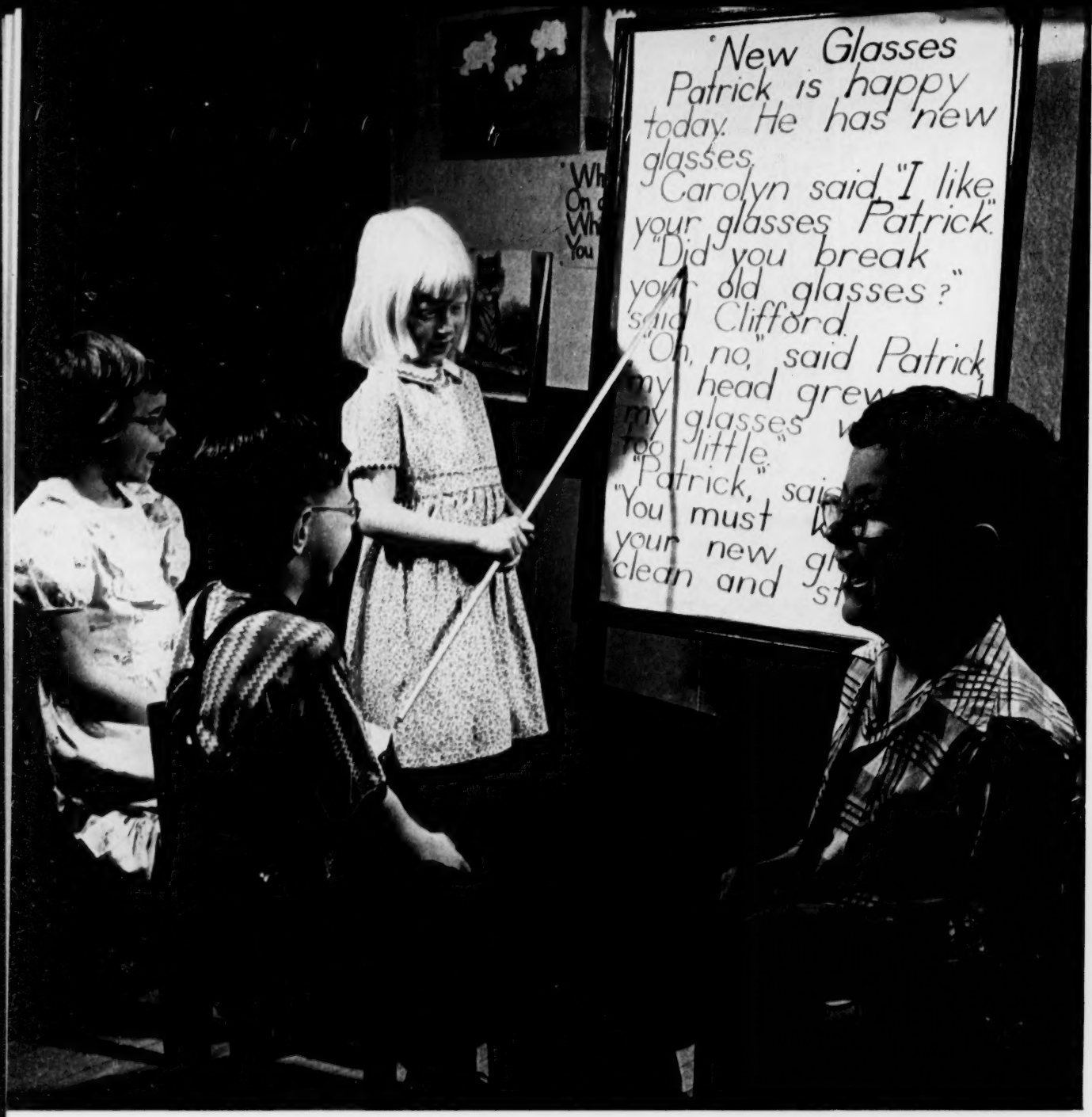
After 40 years of teaching I am often impressed with the slowness of the educational profession to adopt new methods. If the medical profession moved no more rapidly to use new drugs we would just now be beginning to use insulin, and thousands would have died prematurely in the last 35 years. I believe our reluctance to adopt the new is caused by a feeling on the part of the teacher that it is in her best interest to avoid the new and different. If she employs new procedures she may run afoul of fellow teachers, the public, and the administration. At least it seems safer to her to follow tradition. On the other hand, we have managed to put the medical man in a position where it is profitable for him to adopt the latest technics.

Our problem, in giving dynamic to the educational enterprise, is so to manage education that every teacher and every administrator will have incentives to improve, to change where change is indicated.

WORK ON THREE FRONTS

If such incentives are to be developed we must work effectively on three fronts: teacher education, administration and community relations. We must give prospective teachers a scientific, dynamic and creative education. Once they are at work in our schools and communities we must give them a stimulating and creative leadership. Finally we must constantly educate the public to want the newest and best and to participate in educational policy determination.

Democratic administration does not mean that schools are controlled by teachers or by administrators but rather that teachers, administrators and citizens pool their ideas and capacities in a community-wide undertaking that is creative for all. It is the special responsibility of the administrator to see to it that creative capacities are liberated and developed and to make sure democratic processes do not degenerate into an oppressive collectivism dominated by either teachers or the public or both. The accent in the American way of life is on freedom and creativity, not on collectivism. The same emphasis must characterize educational administration.



Children with defective vision

The School's Responsibility to the Exceptional Child

HERMAN L. SHIBLER
Superintendent of Schools, Indianapolis

AT NINETY-NINE out of a hundred conventions of educators, you'll find on the program a discussion of the subject of "meeting individual differences" of pupils. Schoolmen have talked about this matter for a quarter of a century, or more. Some of them have done little about it; others have done much.

The application of the concept of meeting individual needs starts with the admission of pupils, the testing and grading of pupils, and the organization of ability groups in the classroom. It ends with a complete program of special education, under which every pupil, whether handicapped or gifted, receives as much individual attention as the school system can give him.

Special education is, in short, only the logical extension of the idea of meeting individual differences. It carries out, in practice, the principle upon which the public school is founded—that every pupil is entitled to full recognition of his worth as a human being. It is democracy applied to instruction; it is the full realization that the "equal treatment of unequals is the greatest inequality of all." This is the fundamental problem of the American public school system. How well your schools are meeting this problem is really the measuring stick to determine whether your schools are superior or mediocre.

The problems that arise from attempting to apply this principle involve administration, organization, supervision, instruction, budgeting, buildings, specialized facilities, specially trained personnel, and their corollaries—acceptance by the community and adequate financial support.

To begin with, the school personnel must have complete understanding of the meaning of special education. In this respect, our concepts have grown greatly in the last decade. At first when we talked of handicapped children the major emphasis was upon mentally retarded. Then came the providing of special classes and treatment for the physically handicapped, the so-called "fresh air" schools and schools for crippled children.

UNDERSTANDING NEEDED

For years the emphasis in special education was upon what might be called the subnormal child, the child who was mentally slow or physically weak. Now the broader term "exceptional children" is the accepted phrase. It is high time that we realize that the *superior* child is entitled to as much special attention, or "special education," as is the *inferior* child. In other words, the special education program must serve the pupils in both extremes, *above* as well as *below* the normal. The benefits of special instruction should not be given to one group and be denied to the other. This is the present concept of special education for the exceptional child. It must be fully understood by all teachers and the community as a whole.

The public schools have come a long way from the days of the dark ages in education when the problem child was made to sit on a stool in a corner of the room and wear a dunce cap. Now we make an honest effort to find out why the child is not conforming to the general pattern of behavior for his group. We try to discover his mental ability and establish a profile of his personality, checking on his family background and the cause of any emotional disturbances.

To deal adequately with exceptional children, the educator must have exceptional personnel and exceptional facilities. It is true that for the normal children a well trained teacher can handle most of the problems that arise. The regular classroom teacher can go a long way in handling special pupils too, that is, she could if she had the time to do so. But with a class of 35 or 40 children, the classroom teacher has little or no time to give to the exceptional child. The average teacher recognizes that individual differences exist, for she groups her pupils according to their ability, but she cannot find the time to deal adequately with the highly gifted child or the extremely retarded or mentally and emotionally maladjusted children. These cases require the services of home visitors and staff psychologists. Some of these children need psychiatric treatment, which in most school systems is not available.

Unfortunately, many teachers are not fully aware of all the special services that are available within the school and the community for exceptional children and their families. It is a function of inservice training and of the school system's communications personnel to acquaint all members of the instructional staff with the facilities and services that are available.

In a large school system the task of informing all members of the school personnel regarding these services is difficult. Teachers and principals often are poorly informed about services their schools and community provide.

Here we find the weakness of distributing printed material. It has been

The hard of hearing

said that there are three fallacies in this method of communication. In the first place, teachers won't read the material sent to them. Second, if they do read it, they don't understand it fully. Third, if they read it they interpret it according to their own point of view which may be biased and is certainly limited to their own personal experience and colored by their own educational philosophy.

The two prime requisites of a good program of special education are (1) that the underlined philosophy of the program be understood by all and (2) that there be no cleavage or tension between the regular classroom teachers and the special education teachers. The regular classroom teachers and the special education teachers are members of the same team. They have one common objective, to help each pupil develop himself to the limit of his capabilities.

To emphasize the responsibility of each teacher for the exceptional child in Indianapolis, we have a program of inservice education for regular classroom teachers. An important part of our program has been the teacher conference days. Two days, usually in March, are allotted by the school board for systemwide meetings which all teachers are required to attend. Teachers may attend any one of about 15 sectional meetings where methods of improving their teaching technics and increasing their knowledge in a particular subject or field are discussed.

This year the special education section of this conference placed its emphasis on the mentally retarded and the gifted. Of the 225 people who attended this section more than half were teachers of regular classes. We were heartened by this response because we knew that progress in educating the entire staff on special education was being made. Such topics as reading for the retarded, homeroom and vocational guidance for the retarded, visual education, practical reading and arithmetic devices, and providing for the gifted child were considered. Out of this meeting came a much better understanding of our regular class teachers in working with mentally retarded children.

Special education teachers, themselves, can contribute much to a better understanding on the part of regular classroom teachers of what is being done for exceptional children and what further provisions should be made. Attitudes have been changed and programs have been accepted through the simple device of talks during professional building meetings by special class teachers, by sightsaving class teachers, teachers of the retarded, speech therapists, and teachers of classes for the gifted.

CHILDREN NEED TO BE ACCEPTED

It is not enough merely to provide special classes for exceptional children. Generally, a definite effort must be made to make them feel at home in the school. Pupils in these groups must be made to feel that they are a part of the entire school and fully accepted by other pupils and the faculty. If teachers include special class children in general building activities, pupils likewise will accept them as a part of the school.

The Harry E. Wood School, a junior high school, opened in 1953 to serve nine surrounding elementary schools, has 15 classes for mentally retarded pupils of junior high school age, the adapted materials division. The entire school staff was new to the building, as well as all of the pupils, both in regular and in special classes.

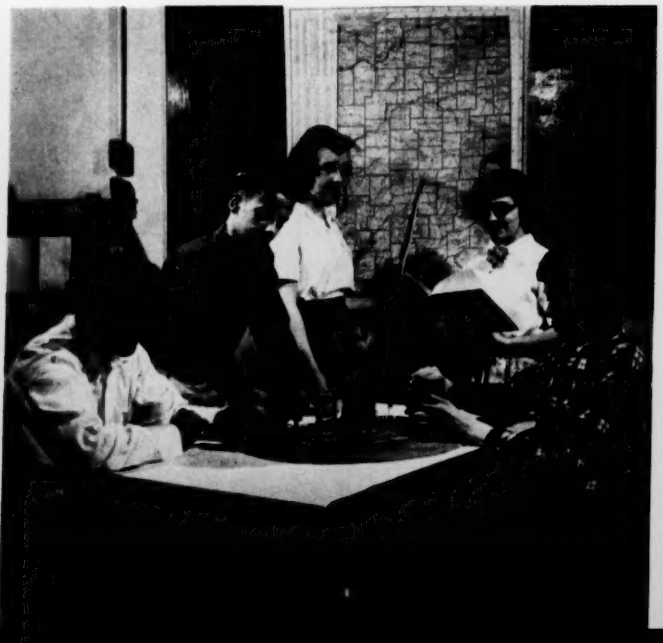
Naturally, there was considerable adjustment to be made both by pupils and by the staff. At first, there was a tendency on the part of the teachers to attribute all infringements of school regulations to pupils in the special classes. If there was confusion in the cafeteria, special class pupils were at fault. Noise and disorder in the halls, they said, were caused by the "specials." At this point special class pupils were the scapegoats and received a large amount of censure as a result.

Shortly after the opening of the fall term selected teachers in the adapted materials division were given the opportunity to explain to the entire staff the special class setup and the program being planned for pupils in their classes. As the months passed and other teachers and pupils became more conscious of the true situation, these special pupils became more and more an accepted part of the school. They are included in all building activities; they are represented on the student council and other building committees, and a number of their parents take an active part in the P.T.A. No longer are they thought to be at the bottom of all building problems; they are just boys and girls —slow learners to be sure—but not labeled and set apart because of their handicaps. Teachers have accepted their responsibilities in this case, and the situation has improved immeasurably.

A new handbook for elementary principals and teachers has been pre-

The physically handicapped

The slow learner



pared. The pupil personnel sections of this manual provide detailed information on all special education services in Indianapolis. The handbook also details the procedures for referring pupils to any of these services. We feel this is helping to make teachers more aware of their responsibility for the exceptional child.

While the close relationship among school principals, teachers and parents makes teachers and principals the logical persons to interpret special education services to parents of exceptional children, it is by no means their duty alone to promote special education. This responsibility must definitely be shared by the administrative staff of the school system, particularly in relation to community facilities. School administrators can better understand what the community has to offer to exceptional children by serving on the local boards of various assisting agencies and by being genuinely interested in the work these agencies are doing. Such contacts not only acquaint them with existing community resources but also win community approval of the schools' cooperation with other agencies serving handicapped children and adults.

Members of our staff serve actively on such boards as the Heart Foundation, Vocational Rehabilitation Committee, United Cerebral Palsy Board, Speech and Hearing Center, *Indianapolis Star* Committee for the Blind, Marion County Society for the Crippled, the Juvenile Court Advisory Committee, and the health section of the Health and Welfare Council, all of which offer extensive service to the handicapped and to all of which we may turn for assistance at any time.

The administrative staff also is given the responsibility for seeing that the special education program developed within the schools includes all types of exceptional children and that service to one group, because of its popular appeal or outstanding need, does not take precedence over services to other groups. It is never difficult to get public support for classes and schools for crippled children. Because of their appeal everyone wants to help these children educationally, and otherwise, and rightly so. But interest often lags in providing special school programs for children with less visible handicaps, and they are the last to be served. The school administration has the responsibility of keeping a proper balance so that no child who needs special help is neglected.

EXTENDING SERVICES

This means an extension of services beyond the elementary schools for both the physically handicapped and the mentally retarded. For a number of years the Indianapolis public schools have had a program at secondary level for mentally retarded adolescents. Because of the wide range of nonacademic and vocational courses available at Arsenal Technical High School and Crispus Attucks High School, these schools established special divisions for retarded pupils—designated in each school as the reclassified division. In this division, programs are planned, on an individual basis, for incoming ninth graders who need special classes because of mental retardation. The head of the reclassified division sees each child before he is enrolled and helps him to select the special classes that will be of most benefit to him. In addition, detailed reports are sent to the department head by the social service visitor and the grade school teachers on the pupil's background and former school experiences and success. This plan has helped the slow learner to adjust more successfully to a large high school and has given him a counselor to whom he can turn for help.

When the Harry E. Wood School was opened, we transferred all of our junior high school classes for the retarded to that school. Plans for these pupils include supervised work experiences with follow-up conferences between employers and school counselors as a means of improving our school program for them. For those who can do only the most routine types of work under close supervision an "all-purpose" shop has been established. Here, simple, useful skills, such as house cleaning service, car washing, and so forth are taught.

Since the training at the Wood School will, in all probability, complete these pupils' formal education, practical courses on family, home and community living, general job requirements, and the necessary personal attributes for good home and community adjustment are stressed. Terminal trade courses for high school pupils in barbering, beauty culture, shoe repairing, dry cleaning, and dental assistantship training are also offered at the school.

We are now planning other specialized courses in (1) floor cleaning, sanding, refinishing and repair; (2) installation, care and maintenance of composition floor tile; (3) installation, care and maintenance of windows and screens plus washing; (4) simple plumbing repairing, such as changing and adjusting faucet gaskets; (5) house-

The homebound child and the visiting teacher

Socially maladjusted children

hold plaster patching, wallpapering, room painting and room cleaning; (6) house painting; (7) care and repair of simple electrical fixtures; (8) household brick work, repair and care; (9) cement work (simple building such as incinerators and patching), and (10) sign painting and construction.

A school's responsibility to its exceptional children does not end with the period of school attendance and the possible acquisition of a trade. No program for these pupils is complete without provision for follow-up, including referral for rehabilitation services for the physically handicapped; job placement for the retarded, and financial help for children of superior ability who need this assistance to continue their education. This phase of services for exceptional children frequently is the weakest part of the school's program, but nonetheless it is a much needed service.

Children with speech defects

Hospitalized children

We do not always appreciate fully the importance of the help and cooperation that can be obtained from interested private groups, clubs and individuals in planning new programs and supporting those already established. Out of their interest can come valuable volunteer service, financial aid, sponsorship of budding programs, and a remarkable amount of public education concerning services being provided by the public schools.

For many years the Indianapolis Foundation paid school transportation costs for our crippled children, discontinuing this service only when a change of the state law relative to the handicapped provided full reimbursement for excess cost. The Foundation also provided scholarships for special class teachers.

The Delta Gamma alumni group and the Junior League of Indianapolis have, for approximately five years, furnished volunteers for vision testing in Grades 3, 5 and 6. These volunteers have willingly taken specialized training to help them administer the tests, and their service has been superior.

When we were ready to organize our first classes for children of superior ability, the Junior League again offered financial help. Four summer scholarships for teachers and $600 for special materials were its contribution to this project. This year the Indianapolis Foundation will provide two more scholarships.

The Lions Club, whose national interest is in the field of the blind and visually handicapped, provides the lighting equipment in all of our sight saving classrooms. It provides many pairs of glasses for indigent pupils.

The *Indianapolis Star* has a growing fund allocated for service to the blind and visually handicapped. Virtually all of the equipment in all of our sight saving classes, including typewriters, desks, electronic dictating and recording equipment, talking books, large type books, and general supplies, have come from this source.

The Indiana Association of Workers for the Blind, as a result of a single talk on our program for visually handicapped pupils, contributed $250 to be used for eye examinations for children of families in marginal income brackets who are not eligible for free service at General Hospital.

It should not be necessary to point out how important *public* education is to the growth and perpetuation of a program for exceptional children. Community education through P.T.A. and other groups, through the press, and through radio and television programs will pay big dividends. The human interest angles of special education, plus the fact that the public, in general, appreciates the efforts of the schools to give educational advantages to all according to their needs, create community approval and support.

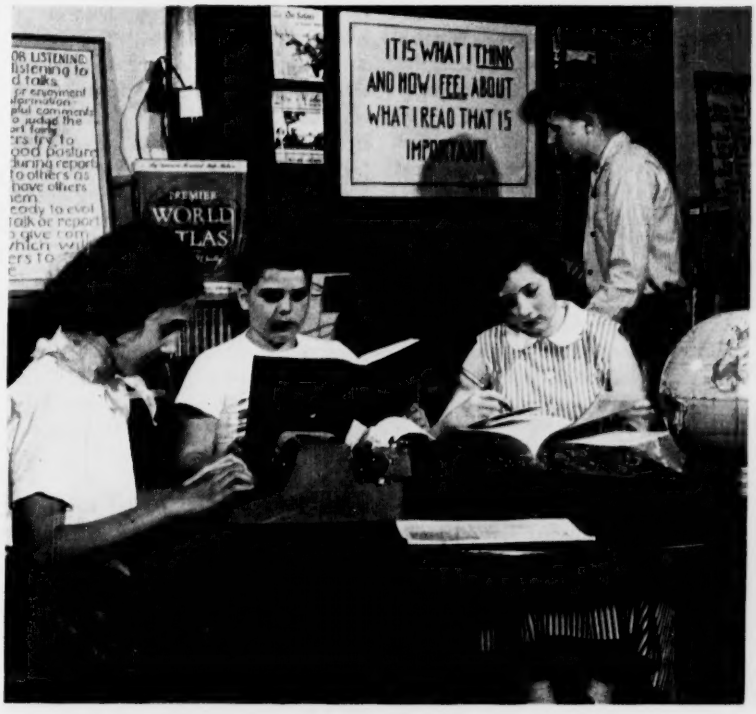
Community support is vital to the success of our program. It will mean more and better housing for our classes, adequate equipment, better trained teachers in the various special areas, and lasting cooperation with us in our efforts to develop an effective program for exceptional children.

We must acquaint the public fully with the purposes of special education, and it must understand that special education is going to cost money. The movement to enroll in the public schools those children who were formerly thought uneducable is gaining momentum and is going to increase tremendously not only the cost of education but also the responsibilities of the school. Children formerly in county or state institutions for the feebleminded or those hidden away in attics will become the responsibility of the public schools. Parents want to keep these children in the home; they feel that they have the right, in a democracy, to have these children exposed to as much training as is consistent with their mental abilities.

There are many of these children in every community; in fact, the number of them is surprisingly large. School programs for these children, as well as for other exceptional children, are going to cost a great deal of money. The special equipment required, the limited size of the group receiving instruction, and the adequately trained staff needed make the education of such children expensive. The money must come from the people. And the people must understand what is being done, because when they are confused they become suspicious. Suspicion gnaws away the support for the best of projects. In fact, the services of the public schools can be no better and no worse than the community will allow. If the schools are to meet their obligation for the education of every child they must be prepared to give the exceptional child the special education that he needs. The responsibility for meeting this obligation belongs to all of us—teachers, administrators, and all the citizens of the community.

Occupational therapy

Gifted children



Multitude of barriers to interchange of teachers among states fosters an inbred system of public education

Certification Laws Restrict Mobility of Teacher Supply

PETER F. OLIVA
Associate Professor of Education
University of Mississippi

TOMATOES, strawberries, flowers and beef can cross the borders of our states with scarcely any restrictions. Consumers in any part of the country can seek and demand the freshest, the highest grade, and the best products from the markets anywhere else in the country. Modern transportation and communication permit the consumers' desires to become a reality. Yet teachers are unable to move freely from state to state.

A community in New York State cannot seek out the best qualified applicant for a teaching position from the entire labor market of the country. Nor can a school administrator in California reach out just anywhere there may be a suitable person for a particular opening in the public school system. The reason? Public school personnel must be certified, that is, granted a license to teach, by the state through its agency, the state department of education.

The authority for certification and the power of the states to control education stem from the Tenth Amendment to the United States Constitution:

"The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."

Since education is not delegated to the United States by the Constitution or prohibited by the Constitution to the states, this function of government is reserved to the states. That is, of course, as it should be. The state's authority for maintenance of a public educational system is in keeping with our democratic traditions to decentralize and keep the power as close to the people as possible. This decentralization provides for understanding of the people in the great mass experiment of free public education. It permits experimentation in new methods of education at the local level. It prevents a national ministry from exercising control over education. For it has been shown in the totalitarian regimes that control over the educational system by the state is necessary to maintain a dictatorship in power.

VALUES OF STATE CONTROL

State control, rather than federal control, makes the people conscious of their responsibilities in the education of their young. It allows the electorate to elect members of the boards of education, to express views concerning the school budget, to levy taxes to support the schools, and to raise money through bond issues for the improvement of the local systems. Education in the United States has become a very personal thing to the citizens of this country, who characteristically want the best for their children.

The layman, then, unaware of the sound reasons behind state responsibility for certification, is amazed to find out that there are actually 48 different sets of certification laws. It comes as a shock to most citizens when they learn that their local schools are unable to employ applicants for their systems because these applicants do not meet the pecularities of the certification requirements of the state. Minimizing the factor of the geographical mobility of today's population, the state departments of education through their state boards of education have set up all kinds of restrictions in the form of special qualifications that a teacher must have before he can be hired to teach in the public schools of that state.

Consequently, the graduating student of education at the University of Pennsylvania cannot automatically accept appointment to teach in the public schools of Arizona. The graduate of the University of Illinois, even though he meets certification requirements in Illinois, cannot accept employment in Michigan until certified by the state department of education of Michigan.

The citizens of a community often discover that the school board many times has to select a less well prepared teacher who meets the peculiar certification laws of his state in preference to a better prepared or more experi-

This map shows some of the requirements for certification of teachers in the various states.

enced teacher who cannot meet these laws. In the process of certification, experience in teaching makes little difference. Thomas D. Bailey, state superintendent of public instruction for Florida, says of this problem:

"Thus it often happens that a teacher who is needed in Florida, who may have been trained in one of the best institutions in the nation, and who may have several years of successful experience does not meet the requirements for full and unrestricted certification in Florida. If he is to teach in Florida, such a teacher must accept a provisional certificate until he can complete the necessary college work for full certification. . . . Teachers who hold regular certification for teaching in other states are often reluctant to accept provisional or temporary certification in Florida."*

By and large, of course, the requirements for certificates to teach in the various states are similar in nature. But peculiarities in the certification laws make the difference in restricting movement of teachers. These restrictions cause a person who might move to remain where he is, since he is already fully certified in that state. The teacher considering moving to another state finds that he has to go through a whole rigmarole of (1) writing to the state department of education in the other state for information on its certification requirements, (2) filling out application forms, (3) getting physical examinations, (4) writing to each college he attended to have his transcripts, the official college records of his work, sent to the state department of education for evaluation, (5) submitting a fee for the new license, (6) submitting proof of age and U.S. citizenship, and (7) obtaining references.

BEWILDERING ARRAY

The states, through their departments of education, have not taken full cognizance of the fact of occupational mobility in the Twentieth Century. This, plus the explicit desire to restrict teaching positions to residents of the state, has resulted in a bewildering array of certification requirements. Restriction of teaching jobs to state residents is accomplished through such requirements as the Nevada one which demands for certification completion of a college course or passing of an examination on the state constitution and school law of Nevada. Other states with similar provisions are Arizona, Idaho, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Washington and Wyoming. Though these states generally allow one year for meeting this requirement, during which time the teacher may teach in the state, many teachers are unwilling to go through the additional trouble of taking another course or of performing the study required for passing the examination.

These restrictions result largely in an inbred system of public education. Schools in these times, when the world has shrunk so small and the problems of society go beyond the borders of state and nation, require the services and presence on their faculties of persons from all parts of the nation. The problem of obtaining qualified personnel is acute in those areas of the country to which large numbers of American citizens are migrating. Mr. Bailey reveals the extent of the problem in Florida:

"More than 3000 new teachers will be needed each year from 1952 to 1958. . . . Florida institutions of higher learning probably could supply 1300 graduates to teach in Florida schools; . . . from 1700 to 2000 teachers must be obtained annually from outside the state."

Special courses taken in the colleges of teacher education are deemed necessary in one state, but are not required for certification in another state. California feels it is essential for every teacher to have a college course in audio-visual education. Therefore, to

*Bailey, Thomas D.: When It Comes to Employing Out-of-State Teachers, The Nation's Schools **49**: 69 (March) 1952.

be certified in California, a teacher must have had such a course.

Arkansas requires a course in conservation of natural resources for high school teachers and a course in nature study for grade school teachers. Utah requires a health education course.

Even in respect to those courses that the states have generally seemed to agree are essential in teacher education, there is wide disagreement on acceptance of quality and quantity of college work necessary for certification. The required number of college semester hours in general education, liberal arts, and professional and specialized education, including practice teaching, differs in the various states. A study of the diversity of requirements shows Ohio accepting three semester hours of student teaching in high schools, with Connecticut requiring six hours. Oklahoma requires that its high school teachers who are seeking the standard secondary certificate must have 50 undergraduate hours of general education. Missouri is content with 27 hours of general education for its five-year secondary certificate. Pennsylvania wants 18 semester hours of professional education courses for its secondary, provisional college certificate, while Colorado specifies 20 for its graduate temporary certificate.

VARIETY OF QUALIFICATIONS

A teacher in North Dakota may receive the first grade professional certificate with a bachelor's degree. The permanent secondary certificate in New York is awarded only after a teacher has completed the work for a bachelor's degree plus 30 hours of graduate work. If you wish to teach French in New York State, you must pass a state examination in that subject, a hurdle not required by other states. A California teacher may be employed to act as a guidance director if he possesses the regular general secondary school credential. In New York to be a guidance director in a public high school the applicant for provisional certification must possess a teaching certificate, have three years' experience, a bachelor's degree, and 30 semester hours of graduate work, including 16 hours in guidance courses.

South Carolina has a unique obstacle to certification in the National Teachers' Examination. In that state applicants for the elementary or secondary probationary Class 1 certificate must attain a grade of "A" or "B" on the National Teachers' Examination.

These are but a few of the differences in quality and quantity requirements for certification.

The very procedures of application for certification are confusing. The state department of education in Florida requests transcripts of work done at teacher training institutions directly from the institutions. Other states, as New York, permit or require that the applicant write the college to have the college forward the transcript of credits to the state department of education. North Dakota requires records of college work on official forms supplied by the state department of education.

Adding to the confusion are the differences in terminology, such as "certificate," "credential," "life-time certificate," "permanent certificate," "temporary certificate," "provisional certificate," "license."

FEES VARY TOO

Fees for certificates range from none in Maine and Maryland to $5 in New Jersey. The states discriminate against out-of-state personnel. Georgia requires a fee of $1 from out-of-state applicants only. Michigan charges its residents $1, but out-of-staters must pay $3 for the same certificate. In some cases, as in Florida, the fee is nonrefundable, even if the applicant cannot be certified.

To teach in Maryland, Montana, North Carolina or Rhode Island the individual must first have obtained tentative appointment to a position before the state department of education will assemble his credentials and issue a certificate. A vicious circle is created in which school boards do not wish to employ a person unless they know he can be certified, while the individual cannot be certified unless he has been tentatively hired. Should he accept a job and fail to qualify for appointment, he must refuse the position or take steps to satisfy the certification deficiencies.

Certificates differ among the states in duration of validity. Some states issue life-time certificates. Others issue temporary or provisional certificates, good for from one to 10 years. Blanket certificates permit a teacher in some states to teach any grade or any course on his particular level, elementary or secondary. In other states the teacher is certified to teach only courses for which he has adequate college preparation.

Evaluation procedures are frequently arbitrary in the certification divisions of the state departments of education. Generally, the title of the course which appears on the transcript is far more important than is the content of the course. The state departments rarely maintain catalogs of all the colleges and universities in the country which prepare teachers. They are unable to check the content of the course. The closer the title of the course is to the statement of requirement for certification of the particular state, the more likely is the possibility of certification.

SOME JUSTIFICATION

There is some justification for the maintenance of the various requirements by the states. This is apparent when one realizes that national certification would be impossible and untenable. The economy of the state, the educational objectives a state desires for its children, and the make-up and customs of the state's population account in part for the wide variety of certification requirements. A state with high requirements for its teaching personnel does not wish to accept automatically into its systems inferior and poorly prepared personnel. New York, for example, would be unwilling to accept the former Class E emergency certificate for teachers in Mississippi.

Yet state boards and departments of education must make adjustments in their requirements which will reflect the changing times and conditions. Reciprocal agreements among the states for interchange of teachers become a "must" if this country wishes to advance its educational programs. What holds up reciprocity? Mr. Bailey in the article quoted previously states:

"The difficulty grows chiefly out of lack of agreement among states and teacher education institutions as to what is essential for the certification of teachers."

In addition, reciprocity is blocked by the lack of reciprocal agreements in the teacher retirement systems in effect in the various states. Many of the retirement plans do not allow credit for prior service completed in other states. In those states where prior credit toward retirement is allowed, 10 years' credit is a common maximum. This financial obstacle drastically restricts the free movement of teachers.

In a succeeding issue Dr. Oliva will discuss steps that can be taken to make interstate movement of teachers less difficult.

Harvard University has developed an "action" doctorate.

An Englishman's View of School Administration, U.S.A.

KENNETH E. PRIESTLEY
Professor of Education and Dean of the Faculty of Arts
University of Hong Kong

THE more an Englishman tries to examine and assess the quality of educational administration in the United States, the more conscious does he become that he can never altogether remove his blinkers. My blinkers are the obstinate prejudices I imbibed at an English public school and ancient university and which I succeeded in hardening as an educational administrator inside one of the English counties' local education authorities.

The first peep through the blinkers came during the war when I served alongside American officers at S.H.A.E.F. and noted American powers of organization. The second peep came when I had forsaken educational administration for a university chair and was allowed to bridge the dollar gap through the Fulbright scheme and spend four months in the United States. And to all the limitations of personal circumstance, time and space must be added the complete lack of literature on the English side dealing with present-day American educational administration.

Serious efforts have been made from the English point of view to study American experience in the realms of commercial management and production, but these efforts have little counterpart in the sphere of educational administration. There will therefore certainly be interest, and possibly value, to both sides in an early attempt to see ourselves as others see us.

Three large issues stand out, and they are all closely related. What, to an Englishman, are the striking features of American educational administration? What are the English impressions of the noteworthy American attempts to improve educational administration? And what appear to be the possibilities of some joint exploitation of Anglo-American experience?

The Pilgrim Fathers took over the Atlantic with them one feature that has remained a major characteristic in both the English and the American tradition of government: A belief in the efficacy of local action. To Englishmen, the suggestiveness of American methods of educational administration lies largely in the extraordinary ways in which the Americans are developing the traditions they have derived from the English of governing by local, in preference to central, institutions.

Each of the 48 states is vested with control over its own educational system. The result is a far greater variety of educational institutions than is to be found in England. Americans argue that this is a great source of strength.

There is everywhere a great absence of rigidity: There is no statutory tier of committees clamped over education at all comparable to the English one. Within an English local education authority the education committee at the center, the divisional executive in the localities, and the bodies of managers and governors for individual schools derive their powers from an act of Parliament and represent all the machinery necessary for detailed public control. The American boards of education rarely represent exclusive power, and the door is open for parents and other interested laymen to intrude, although they have no statutory power to do so. An Englishman feels that the lid has been taken off, but, of course, the lid has never existed.

Lay committees are uniquely American. The growth and development since 1949 of lay advisory committees throughout the United States is much at variance with English ideas. It is exhilarating to see that not only parents but also other interested persons and taxpayers are coming forward in these new lay organizations in the great cities of the United States; they have money, and they are prepared to pay and to struggle to get what they want from the schools and to give to the schools what they believe they need. But an Englishman sees in this movement real dangers both to the freedom of the teachers and to the legal powers of boards of education, and he will not accept guidance on matters of curriculum from unprofessional people who easily fall a victim to the label and the catchword.

The entire American approach is experimental. Educational administrators describe themselves as being at the beginning rather than at the end of the line. Educational administration in the United States is one of those spheres in which there is still room for the pioneer, and even for the adventurer. Confronted with the im-

mense tasks of creating and developing public school systems, the United States can lean upon no rich historical experience but must rely on artificial stimulation instead.

It is 50 years since the United States first began to give formal training to educational administrators and so began to attack the chaos of practice and principle in the different school systems. As the strains and complexities involved in educational administration have grown, so the determination to develop an administrative system which can cope with them has increased.

English prefer school of experience. England has never considered formal training programs for its educational administrators to be necessary, believing that experience is the only school in which the highly difficult lessons needed for educational administration can be properly learned. The changes now taking place in American training programs for educational administrators, under the influence of findings of the Cooperative Program in Educational Administration, are all in the direction of insisting on more practical experience for the students in the courses.

Harvard University has developed a doctorate in educational administration which is styled an "action" doctorate: The traditional thesis is no longer required, but the training course ends instead with the candidate's being involved in an administrative problem of some dimensions. At Columbia the trend is in the direction of giving an extended period of actual practice in some administrative post as part of the training course. Equally interesting is the growing American insistence that a good educational administrator does not work merely by applying laws and regulations but must learn to work harmoniously through his teachers and through his community: In American language, knowledge in the area of human relations and sociological insights are both necessary to the skilled conduct of educational administration.

The normal English view would be that the attitudes and skills required could hardly be taught at school or college; therefore the attempt being made to find out if there is a body of knowledge here that can be discovered and can be converted into working tools for an administrator commands attention. Because the task is terribly difficult does not mean that the task is impossible, but an unprejudiced observer must still feel that in the present stage of knowledge the task is temporarily impossible. The main difficulty is that the teachings of the social sciences are still largely unsystematized themselves, and even if they were not the task of presenting them as working tools for administrators is a formidable one.

Although these attempts to discover what to teach in the field of human relationships and how to discover and think about the sources of power in any given community are extremely praiseworthy, no body of knowledge has so far emerged that would startle an Englishman out of his feeling that the knowledge at stake is only to be gained in the hard school of experience, after all the book work has been done. It may be admitted perhaps that the process of learning through experience might not take so long after these studies.

It is natural that much of the C.P.E.A., operating against a different background, works in directions that are not applicable to the English scene. But a great deal remains that is applicable. Work upon the selection of superintendents or the place of consultants is of interest everywhere. A great deal of effort is being put forth in the United States to discover the best ways of financing public education, and this work too is already attracting English attention. Practices are different in the different local school districts, let alone in the different states of the Union; in one respect England appears to be ahead of America, for England has already discovered how to deal with the financial needs of the poorer local education authorities. Within the program somewhere it is probable that some aspect of every general problem known to educational administration is being covered and studied, and it would be surprising indeed if an English observer could look at the program and learn nothing.

Wealthy communities "leveling up." Nor is the C.P.E.A. by any means the only hunting ground for students of best practices in American educational administration. The United States is so vast that examples of very advanced and progressive practices in educational administration abound equally with examples of very poor administration indeed.

In general, it remains true that the best administration — and the best schools — are to be found in the wealthy communities. Great Neck on Long Island, New York, for instance, is one of the wealthiest communities in the world. And yet, instead of using their wealth to send their children away to independent schools at some distance from their homes, the people of Great Neck have provided their school board with funds to build and staff the sort of school they themselves want for their children. This is real leveling up, and a refreshing change from leveling down. Through action of this sort Americans are trying to make their public schools so good that independent schools become anachronistic, and the task of creating such schools with the ample funds provided acts both as a challenge and as a stimulus to the administrative service.

Opportunity for an exchange in school administration. There has never been a climate more favorable to Anglo-American exchange of educational ideas than the present one is. Many prominent persons on both sides of the Atlantic have recommended such exchange. American assistance in penetrating the serious obstacle of the dollar curtain is already great; the Fulbright and the Smith-Mundt programs, the policies of certain philanthropic foundations, and the well known teacher exchange are resulting in a rather uncoordinated but valuable two-way traffic. But the organized high-level exchange in the technical and managerial areas has little counterpart as yet in education, and well directed exchange in the parallel sphere of educational administration has still to emerge.

The wider benefits of educational interchange no longer require to be pleaded, and of all the diverse methods of promoting it, surprisingly still so deficient, the one that matters most to educators is direct cooperation between individuals. But opportunities arise for group as well as individual exchange. The very size of the Kellogg Project, for instance, and its peculiar characteristics deriving from the American genius for organization demand more than unorganized attention. When the assessment of the Kellogg Project is made in 1955, a small team of authoritative British observers should be ready to participate in both the backward and the forward looks. The full force of such a team will be lost unless it contains representatives from the Ministry of Education, from the

local education authorities, and from the universities.

What are the major American ideas in educational administration to which a British team is likely to attach most significance? Any fresh and progressive setting does, of course, offer an experienced administrator an appetizing selection of day-to-day tricks of the trade, which may differ somewhat from those to which he has grown accustomed. Such matters as the induction of newly appointed teachers, the methods of appointing teachers, notable freedoms of requisitioning, and group dynamics which facilitate the harmonious conduct of education committees have all been given a great deal of attention in the United States since the end of the war. A handbook setting forth a couple of hundred of the best practices in American educational administration would immediately merit, and get, attention in England.

America's impact on British thinking. But British observers have a larger task than this: By 1955 the American response to certain of the permanent realities confronting educational administration will have been clarified, and it is for these more fundamental aspects of American thought that authoritative British evaluation is required. Agreement upon a complete list of what is fundamental would not necessarily be easy, but among the questions occupying a high place, to use English terms, are to be ranked: (1) the depth and scope of cooperation between universities and local education authorities; (2) the desirability of taking account, in our teacher in-service training programs, of the methods adopted by Paul Mort's Metropolitan School Study Council and by other school study councils now being patterned on it throughout the United States; (3) whether the beginnings of something more intelligent than the fierce hit-and-miss struggle for experience should not be devised for the younger men and women who will have to take over the increasingly heavy tasks of educational administration in the years ahead; (4) whether we are incapable of enriching our thinking upon the power structure imposed on education by the 1944 act, in terms of the notable advances made in the social sciences during the last decade, and possibly in terms of the growing American experimentation with lay groups. All these are serious matters indeed.

TV Programs Monopolize Attention, Postpone Bedtime

GARRET R. WEATHERS
Director of Research and Audio-Visual Education
Public Schools, South Bend, Ind.

A RECENT survey of televiewing habits of children in South Bend, Ind., might be of interest to administrators nationwide. The survey was conducted for use in a P.T.A. meeting scheduled to consider some of the problems presented by this important addition to the modern home.

All children in the third, sixth and eighth grades of South Bend schools were contacted. A total of 1964 children was involved, with 1559 reporting television sets in the home—a percentage of 79.3 per cent.

Specific questions were asked concerning programs viewed the previous day, which was a school day. By this means it was hoped to obtain more accurate information than would be obtained by more generalized questions.

Children were asked to say whether they had watched programs during six different periods of the day available for viewing television. The times covered were as follows: before school, during the noon hour, after school, during the evening meal, after the evening meal, and the last program of the evening. In all cases the name of the program watched was requested. Only those answers were tabulated that corresponded to the program schedule of the day involved.

Morning viewing showed little difference between grades. The total group reported 11 per cent so engaged. Noon hour reports showed a big variation, with 63 per cent of the third grade and only 32 per cent of the eighth grade saying they had watched TV at that time. The total for all grades was 53 per cent.

Fewer differences between grade groups were shown for the other three periods. The Yes responses for these periods were as follows:

After school	62.0%
During the evening meal	24.5%
After the evening meal	85.0%

The question, "What's the last program you see in the evening?" produced some interesting results. Program times given are the beginning time in each case. For all grades 21 per cent reported starting their last program by 7:30—in some cases earlier. While 36 per cent of the third graders were in this group, only 8 per cent of the eighth graders were in it. One of five third graders started watching his last program at 9 p.m. or later, while half the eighth graders made the same report, with one in three sixth graders reporting the final program beginning at the same time.

Many children reported very late programs with a scattering of third grade children listing programs beginning at midnight. No eighth grade reports listed programs so late.

An attempt to tabulate types of programs presented difficulties because of the large variety reported. However, the largest recognizable group was mystery and crime, comprising 41 per cent of the total. Variety accounted for 18 per cent and drama for 14 per cent. Almost 50 per cent of the late programs reported were mystery, crime or adventure.

Certain educational implications are inescapable. With such a high percentage of children having television sets in the home which monopolize so much time, the effect on the child is serious.

Only a small percentage of "last programs" could be classified as educational. Is the type of program reported by half these children a desirable ending to a child's day? And what will be the long-term effect on children's health and physical development of loss of sleep and so much time spent in inactivity?

On the other hand, the disciplinary value of television in the home was indicated by the reply of one third grade pupil. All viewing times were checked No. A note of explanation was penciled at the bottom: "I got my clean pants dirty."

The PDQ's of Written Policies for School Boards

MAURICE E. STAPLEY
Professor of School Administration and Assistant Dean
School of Education, Indiana University

IN RECENT years the term "written policies" has been used with increasing frequency. If clarity could be achieved by the number of words devoted to a subject both in speeches and in educational periodicals, everyone should now know the ABC's and the XYZ's of policy formation. There is evidence, however, that there is confusion and that concepts differ on the meaning of the word "policy."

In a recent study in which a large number of superintendents participated, the questionnaire asked for a check mark to indicate in which areas the board of education had "written policies." The returns showed that 60 per cent had them. A follow-up to determine the nature of these written policies resulted in the conclusions summarized here.

To some superintendents written policies meant action of the board reported in minutes of the board. To others, it meant the presentation of salary schedules and similar material in printed or stencil duplicated form. To still others it meant rules and regulations necessary to the efficient management of a school system, such as a statement that the cafeteria would serve from 12 until 1 o'clock. Finally, there were those whose definition of written policies closely paralleled the definition herein presented.

"POLICY" DEFINED

A policy, it seems to me, is an agreement by members of an administrative body describing or defining the manner in which it will act. The term itself means wise procedure or course of action. Minutes are records of how a board has acted, not necessarily a guarantee of how it will act. A salary schedule is a tabular presentation of the levels of payment which teachers paid in accordance with the schedule will receive, but one cannot see from looking at it whether it is the policy of the board to hire all of its teachers according to schedule or whether the schedule is merely a guaranteed minimum. The time set for the opening and closing of cafeteria doors is merely an administrative regulation which may properly be subject to change without any change in basic policy.

Confusion as to the nature of policies does not mean, however, that boards do not have them. Every board has policies. At the very worst the policy may be to make all decisions without regard to the way in which other problems of similar nature are decided. In such a case, the policy of the board would be to operate according to expediency, whim or existing pressures. Boards operating in this manner are not likely, of course, to consent to describe their actions to the community and therefore are not likely to have *written* policies. In contrast, the ideal board will define, after appropriate consideration, the manner in which it will operate. When it puts these decisions into writing, it prepares written policies.

Policies should be clearly differentiated from rules and regulations. A policy interprets a course of action based upon an accepted principle of administration, whereas a rule or a regulation is a specific by-law set up as a guarantee that the policy will not be violated.

The following policies may be considered illustrative:

1. It is the policy of the board of education to consider for employment only those teachers who are initially recommended by the superintendent of schools.

2. It is the policy of the board of education to make all of its decisions in meetings to which the public is welcomed.

3. It is the policy of the board of education to encourage teachers to participate in community activities.

4. It is the policy of the board of education to purchase equipment and supplies at the most economical price consistent with quality.

5. It is the policy of the board of education to stress the importance of developing happy, well adjusted, productive citizens and to provide, in addition and whenever possible, preparatory training for prospective college students.

If we analyze the policies used as illustrations, it can be seen that each has resulted from a choice of possible courses of action. Some boards do not hire only those teachers recommended by superintendents; some do not make all decisions in public meetings; some do not encourage teachers to participate in community affairs; some do not purchase to best advantage regardless of who sells the product or where the seller is located; some do not stress education for the many but rather stress education for the few, supplying in addition and whenever possible some educational opportunities to help the many to become well adjusted, productive citizens.

RULES NEEDED

Rules and regulations are more specific. For example, if a board establishes a policy that it will purchase supplies and equipment at the most economical source consistent with quality, it must have a number of rules concerning the advertising or communication of needs, the method of preparing and accepting bids, the procedure to be used in reviewing bids, and so forth.

If it decides to employ only those teachers recommended by the superintendent it may need such rules and regulations for board members as:

1. A board member shall interview only those candidates for teaching positions who have been recommended by the superintendent of schools.

2. The board may not, after refusing to employ a candidate recommended by the superintendent, employ a person not so recommended.

Rules and regulations designed to govern the superintendent in order to guarantee that this policy will be effective might include the following:

1. The superintendent shall recommend teachers for positions only in regular board meetings.

2. The superintendent shall recommend prospective teachers only after they have been interviewed, preferably by several school staff members.

3. The superintendent shall recommend prospective teachers only after he has written evidence of their preparation, experience and certification.

Policies are a philosophy of education translated into procedures upon which the board has placed its stamp of approval. Rules and regulations are the blueprints for action which guarantee that policies will be effectively enacted.

The distinction is not so important as it may seem. Both policies and rules and regulations may be included in the complete policy manual of the board. Both should be available to the public. Of the two, written policies are more essential than written rules and regulations are. Many boards have rules and regulations governing certain activities but no governing policy for the activity. For example, I know of a school system which has an elaborate set of rules and regulations concerning the use of the bid system. In practice, purchases are made by bids whenever it is not possible, regardless of how much the system is robbed, to get supplies from a dealer whom it is considered expedient to patronize.

PUBLIC HAS RIGHT TO KNOW

Policies should be written because individuals and groups in every community have a right to know and should know how their schools are being administered. No one appears to question the right of the public to exact information concerning the school budget. Every professional administrator and every school board member knows that the budget must be made public to the precise penny. Some of these people overlook two facts when they consider the publication of written policies unnecessary or unwise.

The first fact is that many citizens understand little about budgets and have little conception of the relationship of budget estimates to educational needs. In some states current budget requests are compared with earlier budgets because many citizens understand only this kind of relationship.

The second fact is that the budget emphasizes cost and tells little of how the schools are operated, whereas the administrative policies of a school are more comprehensible and more significant as indices of efficient administration and operation. Perhaps our hesitation in preparing policies had its beginning in an era when it was believed that the less the public knew the better and when many board members were selected because they were likely prospects for curbing school costs regardless of the quality of the educational program.

POLICIES HELP CORRECT PRACTICES

Policies should be written because, in order to write them, those who administer and control schools must focus their attention upon educational objectives and upon sound principles of administration. This focus of attention inevitably results in the improvement of administration and, therefore, of the educational program. Superintendents and board members frequently do things in a certain manner because it is the traditional procedure or sometimes because certain methods of operation are convenient or expedient. Most frequently, these are the errors into which boards of education fall and which school administrators find it inexpedient to oppose. In any case, it is easy to form habits that cannot be defended. It is difficult to write policies that can be defended. But it is unlikely that policies that cannot be defended will be prepared in written form. Sound policies in writing do not, of course, guarantee that boards or superintendents will follow the policies written. How else, though, can one begin to correct practices that violate sound administrative principles?

Policies should be written because uniformity of procedure cannot otherwise be guaranteed. Unwritten policies have an amorphous texture and are highly elastic. They bend to fit situations without appearing to lose their character. But, when words are put on paper, they seem to be more definitive and precise. Perhaps this is an illusion created by the fact that, when ideas are not expressed on paper, they tend to remain vague generalities that have different meanings to different people and that may not mean the same thing to a given individual at different times. In any case, written policies are watchdogs that bark at every imminent violation. It is not easy to heed the barking at one time and to disregard it at another.

Policies should be written because good administration requires that the chief actors know the parts they are to play. Board members, as well as superintendents, should know precisely the nature of their functions. Equally important, they should know what lines belong to other actors. Written policies are the best means of eliminating such common practices as board member interference in actual school management. They can have an equally wholesome effect upon the administrator who has not really understood that he works for a board which represents the public to which the schools belong.

Policies should be written because they can provide an excellent orientation instrument for the new school board member and the new superintendent. It often takes a year for the new board member to dispel the confusion in which he at first finds himself, two years to gain confidence, and three years to become highly effective. Most superintendents spend an introductory period finding themselves and getting oriented before they recommend major changes. If this period of ineffectiveness can be reduced, much is to be gained. Certainly continuity, to the extent that is desirable, is fostered by the preparation of written policies.

LAY LEADERSHIP DEVELOPS

Finally, policies should be written because their preparation helps develop strong lay leadership. This preparation stimulates objective thinking, develops concepts, and pushes back horizons. Laymen who prepare written policies cannot be asleep. They cannot prepare policies without considering all aspects of the administrative process. Ever afterward, they will think more in terms of policy formation and less in terms of the solution of day-by-day problems, properly the province of the school administrator.

In a succeeding issue Dr. Stapley will tell how a superintendent and a school board can write—and put into operation—policies that represent the thinking of the professional staff and of community groups.

School Business Officials View the Promised Land

Reorganization of A.S.B.O. studied and tabled at annual convention . . . General speakers describe national and worldwide crises . . . California professor tells how to acquire ulcers

ARTHUR H. RICE

LOS ANGELES.—"No one man is going to do all of the upgrading of school business administration. As an association, we represent a great wealth of successful experience, practices, procedures, funds and research. Collectively, we can and should put together the things we have done in our respective business fields. If we do this, the future of the association is assured." In these words, Schuyler C. Joyner, deputy business manager of Los Angeles city public schools and president of the Association of School Business Officials of the United States and Canada, expressed the conviction of the 850 members attending the 40th annual convention in Los Angeles, October 10 to 14.

The convention itself was tangible evidence of the great possibilities that President Joyner described. In all its appointments, the four-day convention was definitely "big time." The setting and atmosphere had all the attributes of a national convention—California style. The "extracurriculars" included a Western barbecue, sightseeing, movie stars, breakfasts, luncheons, exhibits, demonstrations, special music—all in the plush setting of an ultramodern hotel—with a generous helping of fog and smog to make the affair uniquely Los Angelican.

The "curriculum" itself consisted of more than 25 meetings, many of them scheduled simultaneously, involving approximately a hundred speakers.

Total attendance at the convention was estimated as close to 2000. The 102 exhibits brought close to 400 representatives. The programs and entertainment planned especially for the women were enjoyed by nearly 400. And one or more of the meetings were also attended by 300 California school administrators.

"A guaranteed way to invite heart trouble is to take your work home with you at night in a heavy leather brief case." This counsel was from D. Lloyd Nelson, professor of school administration, University of Southern California, addressing one of the general sessions on the subject "How to Avoid Ulcers and Heart Attacks."

Quoting medical authorities, the speaker stated that 90 per cent of ulcers are caused by worry and that the chief causes of heart attacks are anxiety, strain and repeated stress.

If you want your family to collect your life insurance early, you might continue to practice these life-shorteners: (1) Work at the office nights, Saturdays and Sundays; (2) don't take your earned vacations; (3) conduct conferences during the lunch hour.

Some other aspects of human relations that will produce middle-sized ulcers, as listed by the speaker, are: (4) Try to cover up rather than tell the truth; (5) if you're new on the job, make a showing by moving too fast; (6) use "I" instead of "we" in working on common problems with your subordinates; (7) when a member of the staff raises a problem, avoid asking him for his proposed solutions; (8) act as if you own the schools; (9) talk down to principals; (10) assume the attitude that subordinate personnel works for you and not with you; (11) spend valuable time telling people how busy you are (most people won't be impressed; they will judge you as incompetent or inefficient); (12) fire an employe rather than first trying to improve him; (13) don't show your staff members the whole project or picture; just keep them busy with details; (14) worry about making decisions rather than operating from sound policies and programs; (15) always win an argument.

D. Lloyd Nelson

LIFE-SHORTENERS

In the area of personnel administration, some life-shorteners described by Dr. Nelson include: (16) the attitude that it's quicker to do a job yourself rather than teach someone else to do it; (17) having too many people report directly to you; (18) too much flow of work on a horizontal basis, which will lead to interdepartmental conflicts.

Professor Nelson also described some business and finance practices that lead to anxiety, strain and stress.

Frank J. Hochstuhl Jr. (left), secretary-business manager of the board of education at Bloomfield, N.J., will become president of the A.S.B.O. January 1. He accepts congratulations from President Schuyler C. Joyner, deputy business manager of Los Angeles schools. Dr. Joyner automatically will become a member of the executive committee for a year.

These included: (19) underestimating receipts and overestimating expenditures. This widespread practice, he said, catches up with you when employes observe it; (20) trying to justify illegal practices on the basis that it is best for the pupils in the district; (21) failure to establish quick and easy means of communication, not only from you but also to you, and (22) deficit financing.

California hospitality is extended to U.S.O.E. Commissioner Samuel M. Brownell by three California school business administrators. Gaily dressed in colorful attire suggesting the Spanish-American influence, 20 members of the California state association served as official greeters for the two thousand members and guests who attended the 40th annual convention of the Association of School Business Officials of the United States and Canada at the Statler Hotel in Los Angeles October 10 to 14. Seen here are (l. to r.) Robert G. Barnes, business manager, Compton Union High School and Junior College District; Ernest W. Carl, business manager, Mount San Antonio College, near Pomona; Commissioner Brownell, and L. L. Cunningham, contract and insurance supervisor, Los Angeles city schools. Mr. Cunningham is past president of the southern section of the California Association of Public School Business Officials.

DESCRIBE SHORTAGES

The national scene as viewed by school superintendents and by the U.S. Office of Education was described by Jordan L. Larson, president of the A.A.S.A. and superintendent of schools at Mount Vernon, N.Y., and U.S.O.E. Commissioner S. M. Brownell.

Both speakers emphasized the serious nature of the shortage in schoolhousing. Said Dr. Brownell:

"The recently completed "School Facilities Survey" for the 48 states reveals that, for adequate housing of elementary and secondary pupils today, we are short some 370,000 classrooms, which would cost roughly from $10 to $15 billion to construct. If we are to meet current needs, we must build nearly 50,000 new classrooms annually just to house the *increased* enrollment. We now build approximately 50,000 a year. Hence, we are merely keeping up with added numbers of pupils. We are not providing for the normal replacements or reducing the backlog of shortage.

"An even more serious situation is the shortage of qualified teachers. We cannot buy devoted and able teachers as we can buy classrooms," said the commissioner. "We started this year with a shortage of about 120,000 prepared teachers for *elementary* schools.

"Another problem is that of illiteracy. In five states, from 12 to 18 per cent of the population between the ages of 25 and 34 years has less than five years of schooling. In 11 other states, the percentage is from 4 to 11 per cent in this age group.

"We aren't spending as large a portion of the total national income on educating children as we have in times past," he declared. "We spend a lower portion than some other countries. The question is not whether we *can* afford it, but rather do we *want* to afford it."

Dr. Larson, expressing greetings and good wishes from the American Association of School Administrators, urged school business officials to get behind a three-point program of financing school building construction. This program is one of increased effort on both local and state levels to raise funds for school buildings and also a sharing of the cost by the federal government. Said Dr. Larson:

"The federal government has a stake in schools, for our schools are the bulwark of our national defense and our national security."

He pointed out that the federal government seems to find justification for assisting the states in the building of roads and in conservation projects, and he suggested that children are just as important to this country as roads and rivers.

Jordan L. Larson

"Furthermore," said the A.A.S.A. president, "substantial federal aid for buildings will enable local and state funds to be used for other critical needs in public education, such as for salaries sufficiently adequate to attract more people into teaching."

"We should demand educational qualifications and credentials for the diplomatic personnel of this nation the same as we do in other branches of governmental service," said John Morley, world traveler and news commentator, addressing the first general session.

Mr. Morley asserted that 50 per cent of our diplomats are appointed on a partisan, political, favoritism or pay-off basis.

RUSSIA SPENDS MORE

Basing his observations on his annual trip around the world, Mr. Morley said that Russia is spending a billion dollars in so-called educational efforts to carry its propaganda into other countries.

Among all the disconcerting facts that he observed in his world travels, Mr. Morley said there is one optimistic note, and that is his belief that there are millions of people behind the Iron Curtain who are defying communism.

"We must make our contact with these people," he said, "on a spiritual level." (*Continued on Page* 88)

Superintendents Oppose Sale of Candy, Soft Drinks in School

SUPERINTENDENTS are 9 to 1 against the sale of candy, gum and carbonated beverages in the school lunchroom. In responding to The NATION'S SCHOOLS opinion poll on this topic administrators testified that there is plenty of pressure from pupils and automatic vending machine manufacturers for inclusion of such services as part of the school lunchroom equipment.

The administrators said, in answering the poll which was sent to 500 superintendents selected at random from throughout the nation, that they have nothing at all against vending machines as vending machines. As a matter of fact, if the content inside ever changed from candy, gum and soft drinks to milk or fruit juices, many administrators think such machines would be worth-while additions to lunchroom facilities.

GIVE IN GRACEFULLY

Results of the poll show, too, that there is not the objection to these between-meal or in-lieu-of-meal snacks at the high school level that there is at the elementary school level. Either high school teeth are not so sensitive to sugar, or else "when it comes to high schoolers, we might as well give in gracefully," as one administrator put it.

Superintendents usually objected to school sale of these products on the basis of health. "To teach health in the classrooms and then promote the sale of foods that are acknowledged to be injurious to teeth is pretty inconsistent, isn't it?" asks a superintendent. And most of his colleagues say Yes.

Objection comes not only because of the dental health angle but also because pupil consumption of such foods usually has the effect of the youngsters' cutting down on the other—and more nutritious—foods offered in the lunchroom. When there is a direct competition set up between a chocolate bar with almonds and a good cottage cheese on lettuce leaf salad, the cottage cheese has a hard time staying in the running.

Health isn't the only reason 9 out of 10 superintendents said No, however. Several superintendents, in answering the opinion poll, related stories of competition with local entrepreneurs in the candy and chewing gum business. On the other hand, the existence of the Bear's Den across the street from the high school may be the very reason, say some superintendents, for setting up candy counters in school. "At least when we sell the stuff in the lunchroom, it helps keep the pupils on campus rather than in the soda joint across the street."

This argument is pursued by the 10 per cent of the administrators who say they favor going along with the sale of candy and other such items at school. Most of them point out, as did a New England superintendent, "We have to permit the sale of these items to keep the high school students from running across to their hangout. The parents of today do not seem to object to their children's buying candy and gum on their way to school. Why not provide it for them instead, when they get here?" Another superintendent gives this advice: "Keep the sale of candy and gum and soft drinks out of the school as long as you can, but as soon as a store springs up right next to the school grounds, buy some machines and go into business. You'll be better off in the long run."

RECOGNIZE SPECIAL OCCASIONS

Ice cream and milk products do not receive the negative reaction from superintendents that the other items do. Apparently it is felt that these are worth-while supplements to the pupils' diet. And then, all of the snack items have some proper place when it comes to special occasions, according to 75 per cent of the superintendents polled. Special occasions are taken to be basketball games, school dances, Halloween parties, and the like.

There is no question on the poll to indicate how many schools *do* permit the sale of candy, gum and soft drinks, but, judging from one superintendent's answer, there is at least one more now than there will be soon. Said he, "I came here new as superintendent this fall, and we have cola vending machines right here in the high school corridors. It may take time, but they are on their way out or at least on their way over to the gymnasium to stay under lock and key until basketball season rolls around."

Signing his comment "Your butter-and-egg-milkman," one superintendent begged for a ban on candy and gum if for no other reason than to protect the TV conditioned youngsters from super-huckstering at least during the few hours of the school day. He wrote, "Let's hold a spot in our children's lives where they won't be faced with, 'take two; they're small' or 'snap back with crack-crack.' There's no place for this in school."

Should the sale of candy, carbonated beverages, soft drinks, or gum be permitted in the school lunchroom or cafeteria?

Yes.....10% No.....90%

Should such sales be permitted regularly on school premises, but not in the lunchroom,

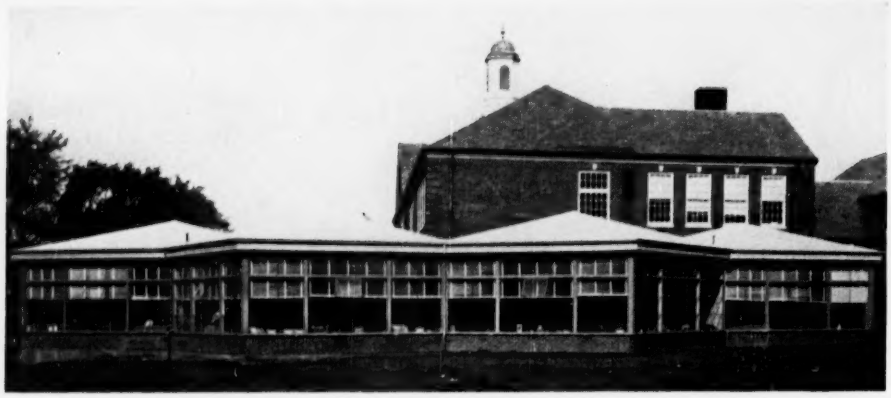
in elementary schools? Yes.....19% No.....81%

in secondary schools? Yes.....30% No.....70%

Should such sales be limited to special occasions only?

Yes.....74% No.....26%

This is one of the pentagonal demountable classrooms at West Newton, Mass.



Above and left are two exterior views of the four pentagonal demountable classrooms that have been added to the Franklin School at West Newton, Mass. The architect declares that the individual hip roof for each classroom in the addition was the most economical type.

No back seats in these

Pentagonal Demountable Classrooms

HAROLD B. GORES
Superintendent, Newton Public School System
Newtonville, Mass.

EIGHT million dollars buys a lot of educational space; Newton, Mass., has spent that much money on new school construction in the last six years. Yet the biggest local headlines went to the smallest project: a modest four-classroom addition, costing a paltry $62,000 and taking care of only the overflow in an existing school.

The Franklin School addition was born out of the necessity of providing housing for overflow enrollment in an elementary school built in 1939. This is not unusual except that in a few years the district may be cut in half by a projected superhighway, thereby eliminating the very overflow for which provision must now be made.

Faced with the necessity of providing temporary accommodations, the school committee examined the entire problem of new school construction for overflow needs and sought a prototype of schoolhousing applicable to other buildings soon to overflow permanently or temporarily.

The elements of consideration are familiar to every town or city of the country where committees have discussed until late hours the need and cost of new school construction.

Having accommodated an increase of 2500 pupils in the last five years, and with 2700 more to come in the next five years, we think the questions posed to us were universal.

1. How could we get the children housed without the city's debt service interfering seriously with new operating costs? The public fisc is confronted simultaneously with the cost

We have visited this school. Though it is a small project, problems that prompted its creation are universal. The answer it provides is, in our opinion, news.—ED.

of housing and the cost of teaching. If the cost of housing should mean that ultimately we must have cheap teaching, the price is too dear for the children. In short, how could we accommodate overflow inexpensively and well?

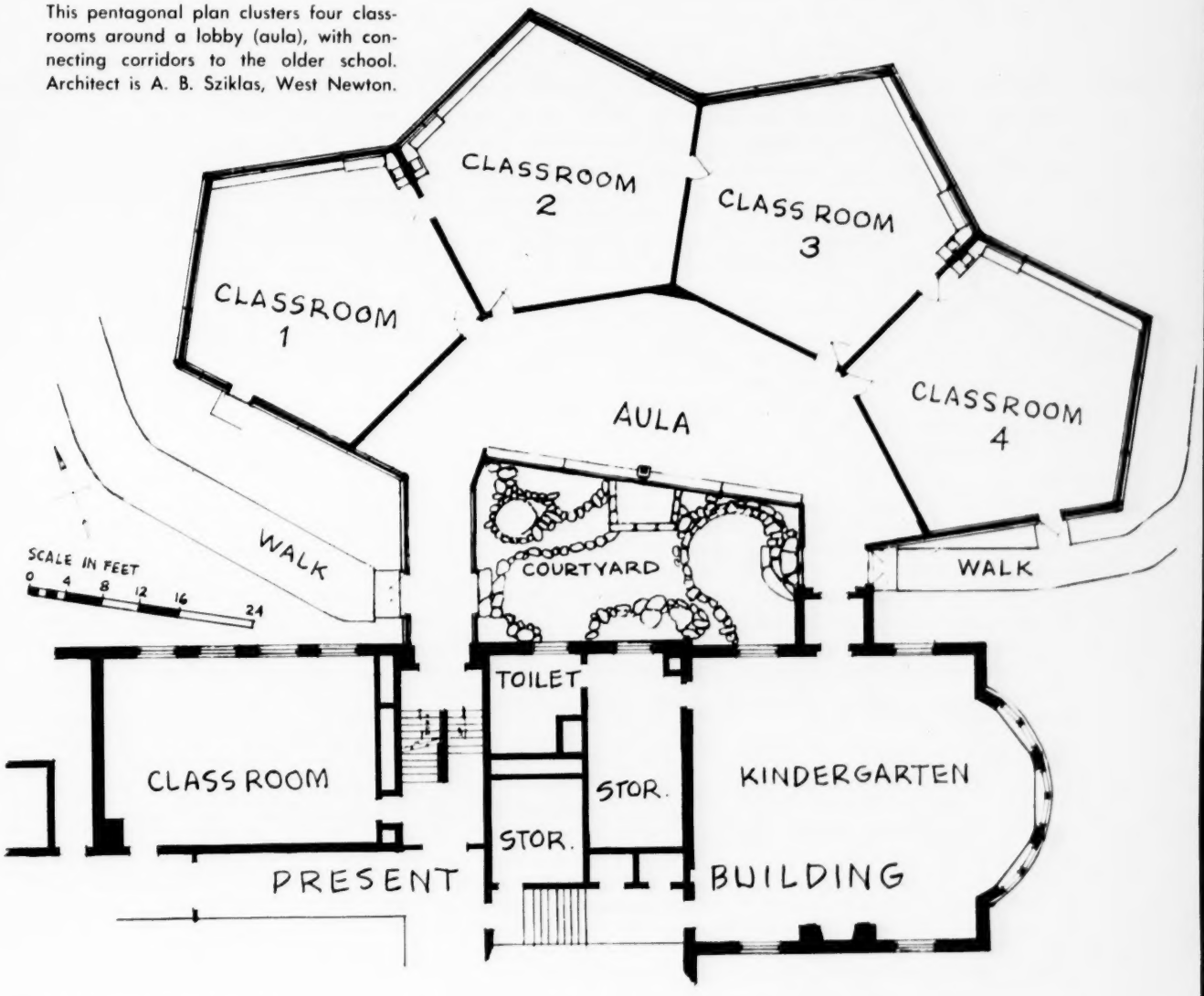
2. We had to consider the essentially temporary character of all school-housing. Who can say for sure that what is best today in the way of a building, according to the best accepted standards, will not be obsolete and in need of costly modernization long before the building wears out, bricks crumble, or the roof begins to leak?

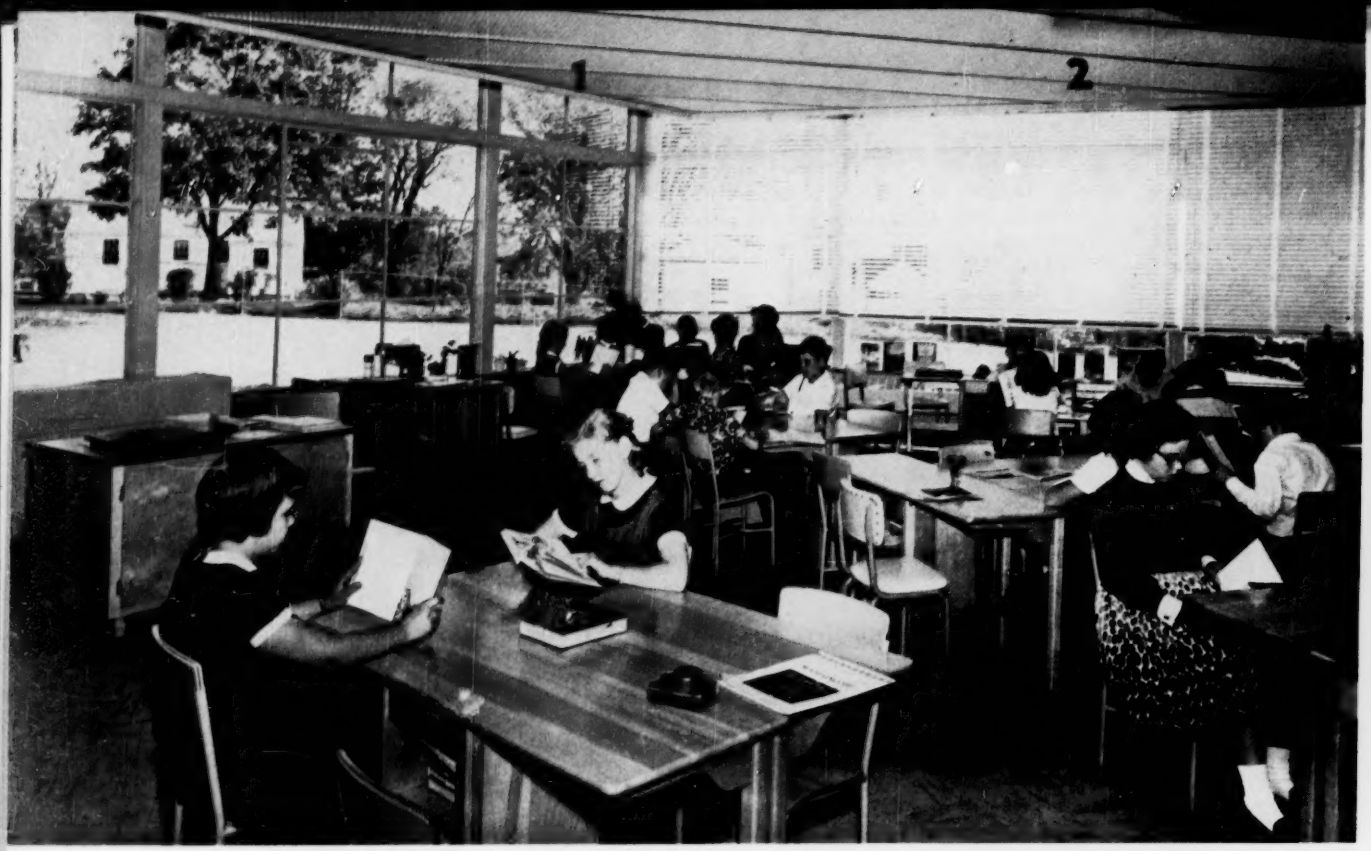
3. The increase in enrollment is a wave washing up through the grades toward the high school. Who is to say for sure that the wave will never recede in any part of the city or in any level of the school system? In the interests of caution should we not gain experience at once with housing that was transportable? As with teachers, desks and books, should not instructional spaces be deployable quickly from school to school or level to level as the tide changes? Dared we risk building a school that a decade or generation hence could be left stranded on the beach?

4. If we decided to provide a temporary building that might be shifted (transported and reerected) to another site following the shifting wave of enrollment, built at a cost commensurate with its temporary character, could such a building be built? If it was to be cheap, did it also have to be poor? If movable, did it also have to be shoddy? Was there a transportable school that did not repeat the sordid history of such structures, which years ago cluttered our schoolyards, devoid of educational essentials, an eyesore to the neighborhood, a hazard to pupil morale, a block to inspired teaching? Must misshapened plan arrangement be the price of compactness? Could shop fabrication turn out barracks only? Would a parasitic building become a depreciating burden on the use and prestige of the original building?

5. And, finally, could we devise a building that would cut new ground in quality of environment for learning? As long as we were willing to experiment structurally, might we not also experiment educationally? Would too much experimentation deprive us of eligibility for state aid? And the biggest practical question of all questions: Granted that all this could be

This pentagonal plan clusters four classrooms around a lobby (aula), with connecting corridors to the older school. Architect is A. B. Sziklas, West Newton.





This picture and the one on the opposite page give a panoramic view of the five sides of a pentagonal classroom in the Franklin School addition. Daylighting from two adjacent sides is supplemented by a luminous ceiling.

done, would such a school be acceptable to the neighborhood? to the taxpayers? to the city?

These were the general questions. There were also considerations peculiar to the Franklin School situation:

1. The need for speedy construction so the addition would be ready for the fall term. This allowed about 100 days for completion time.

2. The inadequate site, on which the customary arrangement of classrooms end to end along a corridor would have eliminated much of the playground space.

3. The indication of a possibility that five additional classrooms, instead of four, would be needed.

4. The availability in the original building of auditorium, gymnasium and conveniently located toilets.

PROTOTYPE OF BUILDING

Out of these considerations emerged the Franklin School addition. It is intended not merely as a particular solution of one particular problem, but as a prototype of building which may or may not be the answer—for the time being at least—to the search for quality, economy, transportability, compactness, speed of construction, acceptability to the neighborhood, and eligibility for state aid.

It is recognized that one man's answer may be another man's poison. Some of the decisions that went into the building's design were overdetermined by the cumulative effect of minor considerations; others were arbitrary, suggested by personal predilections of the parties involved. (The panel of wallpaper in each room is a case in point.) None was dictated by a conscious desire merely to be different. The only valid test—use—is taking place this school year.

The pentagonal classroom is the element of the design. Twenty-three feet long on each side, each with two window walls, four of these rooms cluster around a central space—the aula—from which they are accessible. The shape was first suggested by considerations for compactness; it was tested for educational aptness by the creation of a mockup, studied by a group of teachers under the direction of J. B. Everett, director of instruction. The consensus was that:

1. The classroom shape creates an illusion of circularity, of cohesion, of unity. As one teacher saw it: "In this room there are no back seats."

2. The classroom's five corners offer the opportunity to create five interest centers and, thus, an additional source of motivation for learning.

3. The classroom gives an illusion of greater space than its actual 920 square feet, an illusion enhanced by the openness of the two window walls and its 108, rather than 90, degree corners.

4. The classrooms clustering around the central space—the aula—create a sense of community.

5. From part of each room the child can see parts of the adjoining rooms, right and left, where other children in other classes are engaged in similar tasks; this may contribute to a sense of belonging to a larger group striving toward a common end.

STRUCTURAL ADVANTAGES

There were also structural advantages, the by-product of a decision based on the foregoing considerations. The pentagon is roofed over by a skeleton frame of tent shape, permitting extremely economical framing which stood the test of this fall's battery of hurricanes. Despite the 46 linear feet of window wall, there are 69 linear feet of usable wall space, all of which is directly lighted.

The aula, the 1200 square feet of the central space from which classrooms are accessible and around which

Here are the three "inside" walls of the classroom. Despite the feeling of spaciousness, total area is only 920 square feet. The door at left opens into an adjacent classroom; the door at right opens into the aula.

they all cluster, has the shape of half an octagon; it measures 70 feet in its longest dimension and 24 feet wide at its center. Its 40 foot window wall faces an enclosed courtyard open to the sky. This successor to the corridor will function as a multipurpose room, providing overflow teaching spaces, special teaching space for small groups, and audio-visual facilities. Should enrollment again overflow, a fifth teacher may be located in the aula to work tutorially with small groups drawn from the four rooms. Newton's citywide average of 28 pupils per classroom could be exceeded by seven pupils and, by the use of the aula as locus for a fifth teacher to work with small groups drawn from the four classrooms, we could still retain an over-all pupil-teacher ratio of 28:1 for the 140 pupils in the unit. In other words, the aula, which provides a desirable auxiliary space under normal conditions of enrollment, can be used to create a built-in expansibility of 25 per cent under conditions of overflow.

COURTYARD A MUST

The courtyard separates the aula side of the addition from the old building. A luxury at first glance, this courtyard was a *must* if windows in the old building were not to be blocked. It will be put to use as an outdoor science classroom; its miniature pool provides living space for goldfish and turtles; carefully selected plants set in the flagstoned borders surrounding the sand floor may or may not survive the rigors of school life. In any case the courtyard is not meant to be decoration; it will be used as an outdoor working laboratory for living things.

The luminous ceiling might also be considered a luxury at first glance. Yet it was considered necessary for the pentagonal shape, which measures more than 35 feet in depth at its apex. The cost of the luminous ceiling exceeds the total cost of plasterboard ceiling, acoustical treatment, and conventional lighting fixtures by about $100 per classroom. The luminous ceiling provides 50 lumens per square foot, evenly distributed. Newton installed a luminous ceiling in an experimental classroom five years ago. The experience has been highly satisfactory.

Windows are stock steel of the wide pane type; stool height is 20 inches from the floor, so that the small children can have a vista; the windows extend to within 3 inches of the ceiling, leaving space above to recess the shades. The lowest row of panes is glazed with wire plate glass.

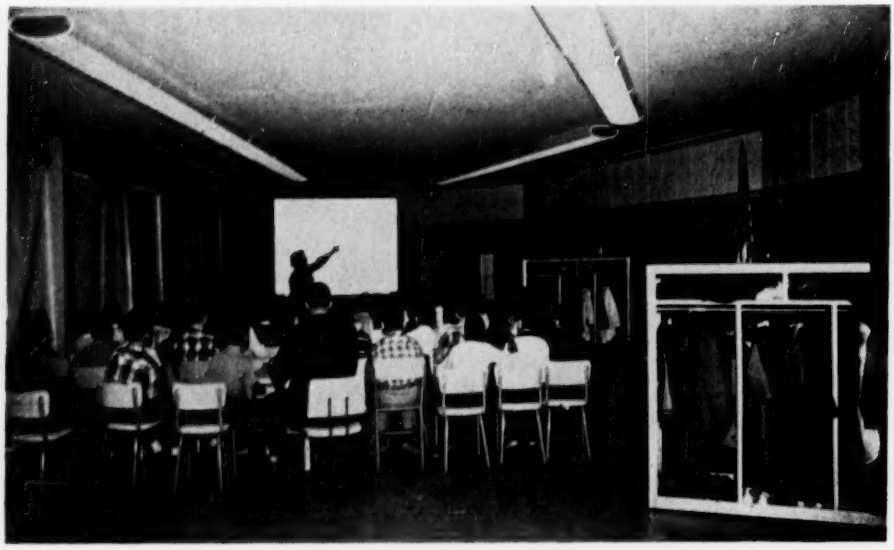
GENERAL CONSTRUCTION

To meet the requirements of transportability all elements of construction were divided into three classes:

Demountable: The wood frame, in unit panels, with bolt or screw fastenings, with sheathing and insulation attached; the steel windows, the doors and frames, the cabinetwork, such as cupboards, window seats, chalkboards, tackboards and pegboards, which are self-contained units, adjustable for height, and which cover three sides of each classroom.

Salvageable: All heating, plumbing, ventilating and electric appliances above the concrete floor slab, together with piping, ductwork and wiring; these will have to be dismantled, transported and reassembled, should the building be moved; acoustic tile siding, slate window sills, interior trim, gutters, conductors and exterior trim.

Expendable: The concrete floorslab and all piping underground will remain; the star shaped slab, stripped of finish floorings, will become part of the playground on which the addition now stands. Brick veneer exterior



With windows at the left darkened, the aula is used for audio-visual purposes and other group activities. The elliptical shape of the room is especially suitable for the seating of one or more class groups. Two of the four wardrobes, one for each class, are at the right.

(which was put on solely to acknowledge the architecture of the main building), asphalt tile floorings, rubber tile bases, vinyl plastic dadoes, wallpaper, roofing and flashings.

EQUIPMENT

Heating and ventilating: Conventional design, window type of unit ventilators, and exhaust fan on roof; additional direct radiation or convectors along window walls. Steam supply from present heating plant in old building. The cost of connecting supply lines to present boilers was not included in the contract.

Plumbing: Sink in each classroom and drinking fountain in aula; hot and cold water supply from present building; waste to drywells.

Electrical: Luminous ceiling in classrooms; aula and corridors lighted by conventional fluorescent fixtures; the usual complement of convenience outlets, clock in every classroom (at children's eye level), switches, public address, program bell and fire alarm systems, all connected to present circuits in old building.

Chalkboards: Green, self-contained 10 foot units, adjustable in height, two in each classroom, with map rail.

Tackboards: Self-contained units, gray cork, 10 foot and 4 foot unit in each classroom.

Pegboards: One 4 foot unit in each classroom—for mounting three-dimensional displays.

Coat racks: Movable sections of semi-enclosed racks, children's size, with hooks and hangers, and also a shelf for hats.

In short, the addition makes no compromise with educational standards: It provides greater classroom space than the standard 24 by 36 foot classroom; it has all the equipment standard in our best schools, the same heating and ventilating equipment, the same finishes or better (as, for instance, vinyl plastic dadoes), and certainly better lighting both for daylight and for artificial illumination than any of our existing classrooms, or, as far as we know, any classrooms in the state.

The addition joins the old building; ample toilet facilities are available in the old building right off the connecting corridor. Steam and cold and hot water supply are available from convenient points in the old building. Adequate administrative space, health unit, library, gymnasium and auditorium in the old building made it unnecessary to provide space for these activities. Should it ever become necessary to make the four-room addition a self-contained school in a new location, this can be done. Furthermore, two clusters of four rooms each may be joined together with administration and gymnasium section forming the central space.

The contract was signed for $55,228. Additional costs which arose from change orders relating to the structure and the provision of a contingency fund brought the cost of the structure itself, including a normal amount of site improvement, to $56,973.28. The cost of connecting the addition to the main building (4 inch steam supply by 2½ inch return to boiler room in main building, including new pump, and fire alarm, telephone and public address connections) amounted to $4175.72. This cost is substantially higher than normal. Extraordinary grading and drainage required by the nature of the site cost $1351. Total cost of the project, exclusive of architect's fee, was $62,500. The per classroom cost therefore is approximately $16,000. If the aula is used for class instruction, the cost per classroom will be reduced to approximately $13,000.

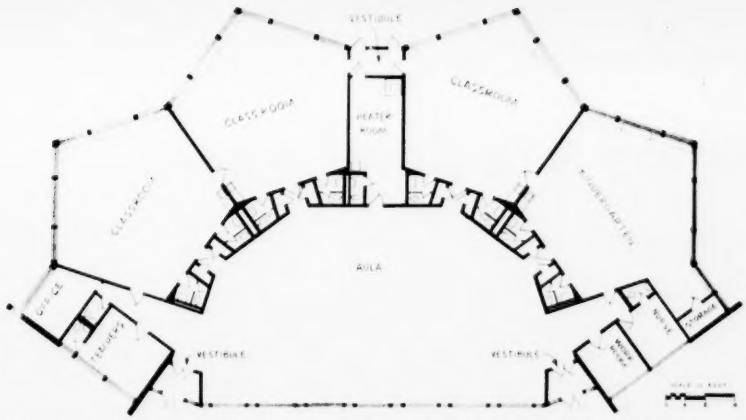
It should be considered that this is a parasitic building, with utilities attached to an existing building and all auxiliary facilities on hand in the old building; the new addition contains nothing but pay-space for instruction.

COST COMPARISON

For purposes of cost comparison in regions other than the Greater Boston area, the following are sample hourly wage rates established by the Massachusetts Department of Labor and Industries for this area: bricklayers, $3.085; common laborers, $2.07; carpenters, $2.75; electricians, $3; painters, $2.35; plumbers, $3; steamfitters, $3; sheet metal workers, $2.85; truck drivers, $1.945.

The Massachusetts School Building Assistance Commission cooperated by approving the building for state aid at Newton's standard rate of assistance (20 per cent) with the proviso that, if bonded, the amortization not exceed five years.

Of the 13 bidders, nine were within the range of 10 per cent of the low



This plan shows the architect's proposal for adapting the pentagonal classroom design for a self-contained neighborhood school. Administration rooms have been added at the ends of the radial unit. Toilets have been provided for each classroom. The aula has become a multipurpose room.

This is a reading corner in one of the pentagonal classrooms. Luminous, suspended ceiling (at left) is joined to top of windows by upward slanting section of plywood (right). Plywood is painted white to reflect daylight.

bid. The low bidder was awarded the contract on May 24. Despite 10 days of torrential rains which delayed the start of the work and two hurricanes during its construction, the building was ready for occupancy at the beginning of the school year, on September 13.

The addition was furnished and equipped for $9171. Desks are the so-called airplane type, constructed to Newton specifications. On the theory that the good will of the child is important even though by law he must come to school, the chairs have padded seats and backs. To give dignity to the growing pupil, the reading corner is furnished with upholstered occasional chairs.

Portable cabinets are supplied for storage. Display space, both tackboard and pegboard, is multiplied several times by the use of display panels. Each room is protected from direct sunlight by venetian blinds according to the orientation of the room. The aula is equipped with white opaque shades so that the room can be darkened when films are shown.

In sum, the Franklin School addition brings together in one building all of the following elements: pentagonal classrooms, economical transportability, parasitic relationship to an existing building, compactness, adaptability to shop fabrication, economy and speed of construction, and a design that allows 25 per cent flexibility of overflow within itself.

"PROOF OF THE PUDDING"

In the last analysis a building is no better than the children, teachers and parents say it is. The testimony of Joseph H. Randall, principal, offers a clue: "The proof of this pudding is in the teaching. So far the proof has been overwhelmingly favorable. The size and shape of the classrooms make it possible to conduct a variety of group activities simultaneously without confusion and congestion. We like the acoustical treatment. Pupils and teachers do not compete with one another and with resounding walls for the privilege of being heard. Teachers and pupils speak softly, yet the spoken word is not dead.

"The luminous ceiling is superb. It is a glowing radiance, seemingly from all directions, with no shadows and no glare. The children work *in* light rather than *under* it. Indeed, the whole environment of this school addition pays off educationally."

Today's school planning emphasizes

Land Use and Site Development

JOHN McFADZEAN
McFadzean, Everly & Associates, Community Planning Consultants
Landscape Architects, Engineers, Winnetka, Ill.

SITE development and land utilization are important aspects of the total planning for schoolhouse construction. In the past school boards frequently neglected these activities. Without adequate study, they purchased a parcel of property and commissioned an architect to "put a building on it." When the building was completed they employed a landscape contractor and instructed him to plant some shrubs and trees around the structure. The tragic results of such rule-of-thumb procedures can be observed in countless school plant developments throughout the country where the attractiveness and efficiency of school buildings are severely limited by inadequate site planning and land utilization.

Site planning and land utilization are highly complicated activities. They require comprehensive studies in the areas of landscape architecture, civil engineering, geology, soils and horticulture. They involve a variety of problems, including orientation of buildings and outdoor areas with respect to sun and wind, division of land tracts into logically related parts, and drainage of the land by natural run-off and stream courses and subsurface drains.

NEW TECHNICS USED

The field of land utilization for schools has been revolutionized, and new professional technics have come into use. The work requires understanding of educational philosophy. It requires knowledge of the program that interprets the philosophy. It employs many skills of design to give maximum use to the out-of-door portion of the school plant. The site planner who has special knowledge of education can perform these services.

The one-story elementary school has gained favor for several reasons. It lends itself to relatively easy expansion when the school population increases (initial plans should include locations for future building and site development); it is safer, and its construction eases traffic, promotes accessibility, and offers better lighting and ventilation.

Schools are so expensive to build and operate that administrators must justify the heavy costs by making provisions for greater use by children and youths in their recreational activities and school program and also by the community.

Nursery schools are soon to be within the orbit of the public school and call for special planning. They require accessible outdoor areas that are safe, intimate, quiet and enjoyable.

The school that provides for nonschool uses—the community school—may have an outdoor theater at a pond or ravine, with dressing room accommodations for theatrical events in summer. In winter the theater could be used as a skating shelter for both school and community.

The community school auditorium is usually set apart, as is the gymnasium, and a parking area is provided to serve leisure time needs of the public. This is a service for *spectators* and is costly, but it is essential in today's school.

The community school has won the blessing of legislative bodies, and most states have approved nonschool uses of public educational buildings. Many municipalities have set up regulations for off-street parking at schools. Building codes have been revised to allow more freedom in architectural design and economies in construction.

Since the one-story school building has become predominant, new concepts of the school site are needed to fit the spread-out building. Sites must be larger. Many secondary schools are divided into unit buildings connected by outdoor corridors. Others are being developed on the campus arrangement. It is understandable that the school population — housed vertically for years—needs room in which to spread both indoor and outdoor facilities.

Another reason for a larger school site is community use. Nonschool activities demand enlarged facilities, such as an auditorium, a permanent outdoor grandstand with ticket, telephone and toilet facilities for the public, and adequate parking areas.

The school site must be large enough to accommodate the building proper and the great variety of facilities involved in the school's program.

NEW RELATIONSHIPS EXIST

The size and shape of contemporary school buildings are not the only innovations. The site planner is confronted with a new kind of *relationship* between the inside and the outside of the school plant. An example of this is the preoccupation of architects with various studies of lighting and ventilation. The use of glass instead of solid walls not only has allowed a flow of natural light but also has afforded a sense of freedom and spaciousness. Importantly for the site planner, it has wedded the outdoor with the indoor world. The architect is dependent on "design *outside* the structure to make his building a harmonious one. Conversely, the site planner must thoroughly understand indoor design and functions in order to project them beyond the walls and windows of the building. Outdoor corridors are not merely "covered walks." They are associated with both the building and the grounds by the manner in which they are situated, used and seen. They become gathering places for students and can be used as bus loading docks. Other facilities

belong to both the indoors and outdoors—courtyard eating areas next to lunchrooms, library patios for relaxed reading and discussion groups, and garden spots.

Views across distances become "part" of a building as soon as the architect sketches a glazed wall into his drawing. A school located next to a community park can become a part of that park and make use of its facilities. The trend toward cooperation between park and school boards has now become a fact, affording the taxpayer greater facilities at a lower cost.

All these conditions demand new attitudes in design and planning, and the architect and site planner must work together if the most advantageous results are to be achieved.

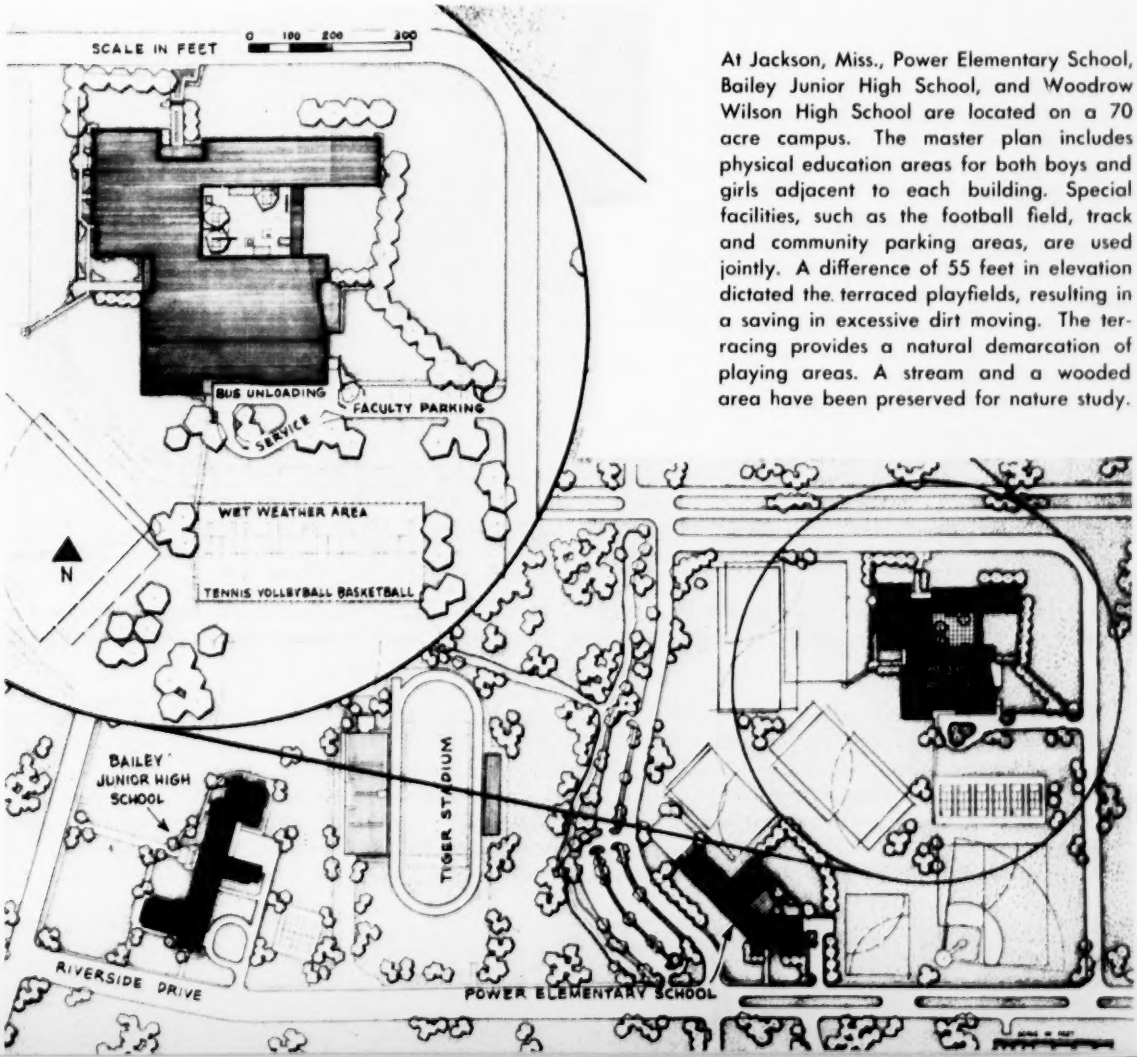
As soon as a new site has been selected, a period of *cooperative* design begins. It is at this stage that the school administrator, the educational consultant, the site planner, and the architect must work closely together. A scheme for the whole school plant must be evolved which (1) fits the requirements of the program for school and community use, (2) is coherent in design, (3) is efficient to use, (4) is easy to administer and maintain, and (5) is economical to build, operate and expand. These basic requirements were given consideration at the time the site was selected, and the general "use areas" were outlined, such as those best suited for the building, walks, drives and parking places, and athletic fields.

At this stage the architect and site planner are translating the needs of the program into facilities. These needs have been determined by the school authorities and the public agencies that will use the school plant. The school program requires a building with a certain number of classrooms, laboratories, shops, physical education areas, and elective facilities. The combined *school and community program* determines the extent of such facilities as auditorium, gymnasium, athletic fields and stands, and parking.

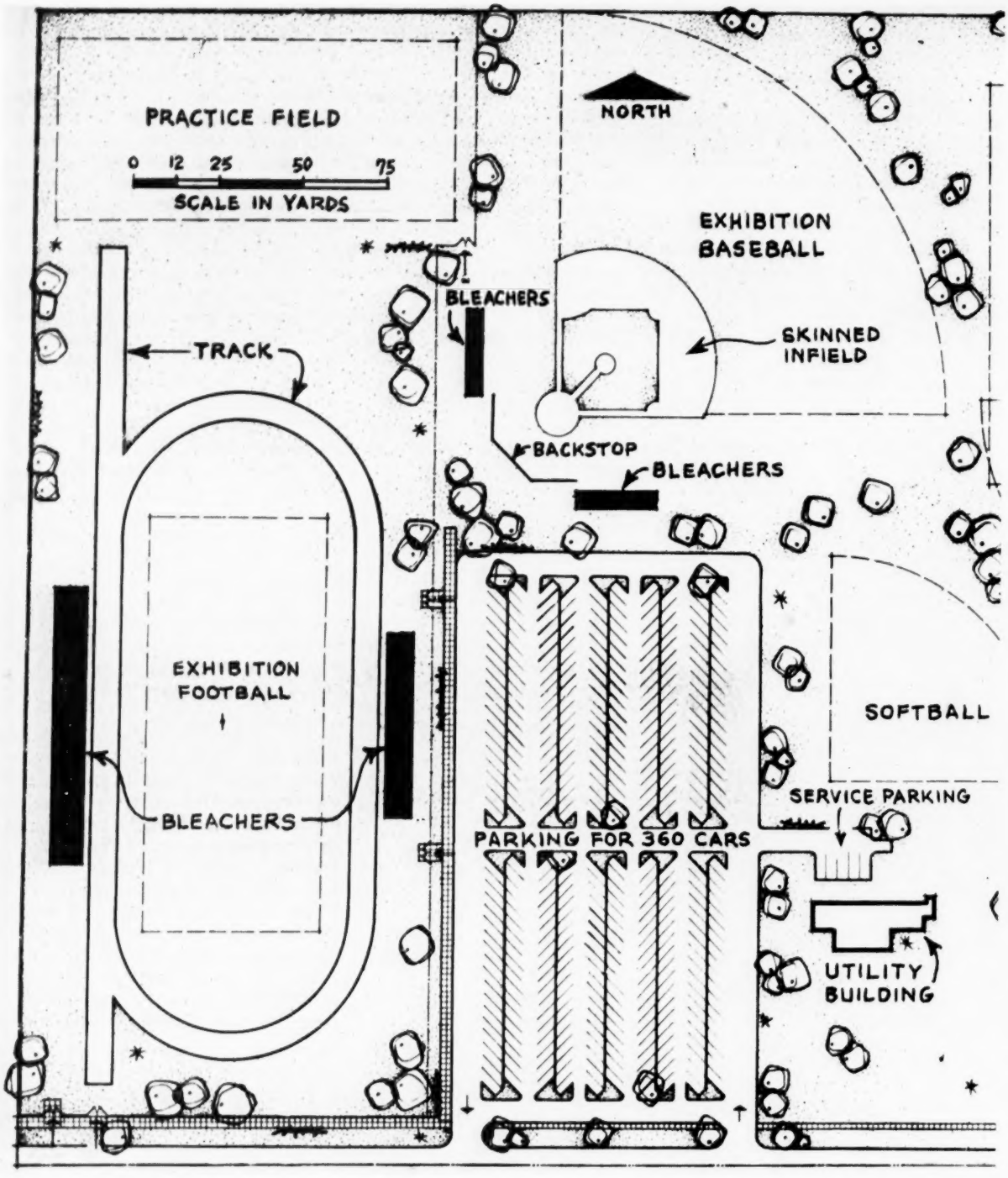
The designers know that it is necessary to provide a scheme for the whole plant so that it can be enlarged when future needs arise. It must also be flexible enough to allow for normal changes in activities and interests. The building should be so situated that new wings can be added in the years to come without the necessity for tearing up all-weather courts and disrupting circulation around the plant. Playfield areas should be generously provided since they are used for numerous physical education and recreation activities and are adaptable to changes in use. Many schools have had to restrict outdoor activities because the general playfield area was crowded against other facilities. Others have been faced with a lack of intramural space for girls because preference was given to the program for boys.

The general playfield area should present a park-like appearance and be an open turf area large enough to accommodate a number of team games simultaneously. It should be adequately drained to permit almost constant use. Team games, archery and pageants are examples of the many types of activities that can take place on this fundamental area.

The design of the whole school plant should have integrity. It should be based on the special regional characteristics of the land and the people.



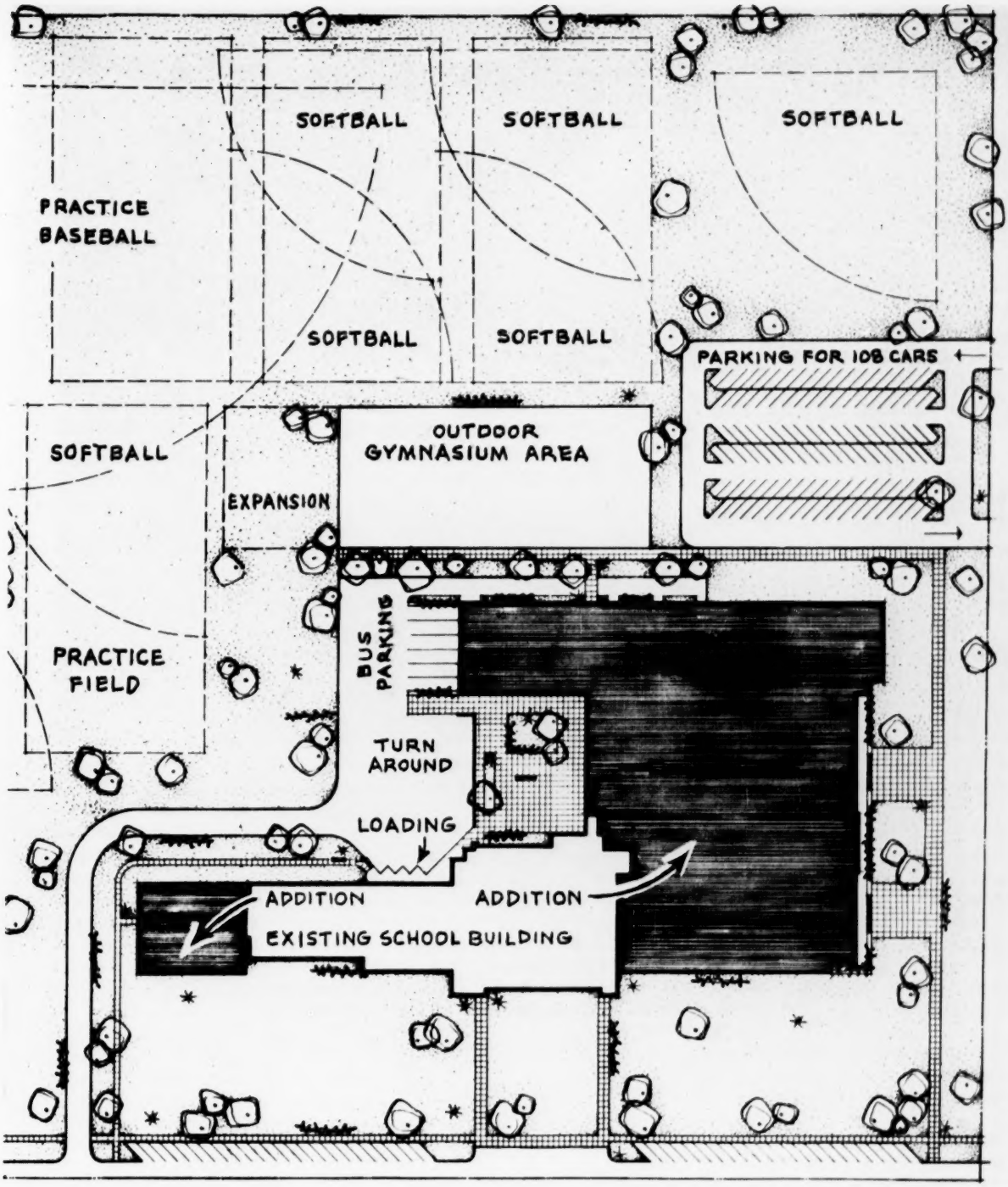
At Jackson, Miss., Power Elementary School, Bailey Junior High School, and Woodrow Wilson High School are located on a 70 acre campus. The master plan includes physical education areas for both boys and girls adjacent to each building. Special facilities, such as the football field, track and community parking areas, are used jointly. A difference of 55 feet in elevation dictated the terraced playfields, resulting in a saving in excessive dirt moving. The terracing provides a natural demarcation of playing areas. A stream and a wooded area have been preserved for nature study.



This is the site plan for the Reavis Community High School, Oak Lawn, Ill. Included are separate physical education areas for boys' and girls' activities and six tennis courts so designed that the areas can be used for basketball prac-

Just as the building should appear to be at home in its locale as a result of the use of native building materials, so the site should be planted with native trees, shrubs and ground covers. In this way a large city school may take on a rather formal aspect, while the rural school should properly be informal. The natural character of the site should be preserved if this is feasible. In fact, the natural topography can form the basis of the design, with results that are interesting and beautiful as well as economical. Grading should be done only when necessary. It is expensive to move earth, stockpile and rework it, and then install drainage lines.

Ponds and streams offer opportunities for the study of wildlife and provide rinks for ice skating and water

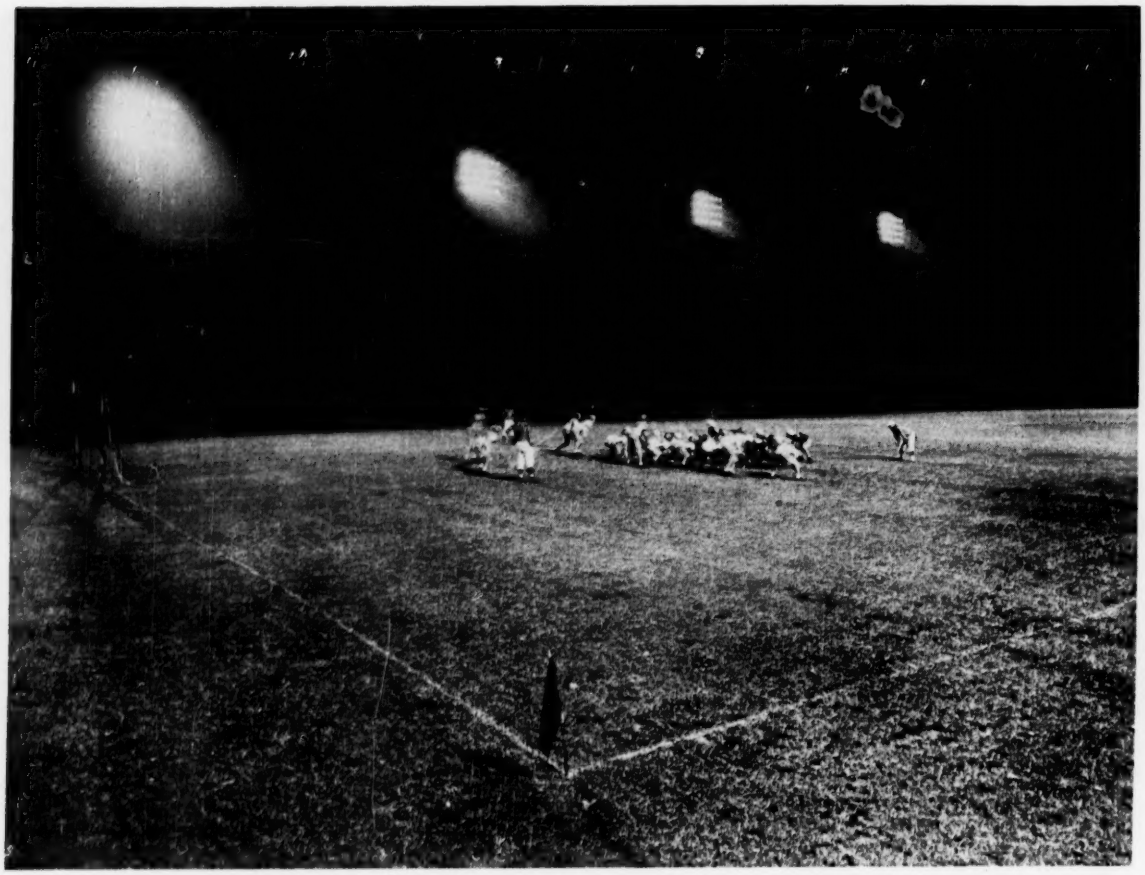


tice, volleyball and skating during the winter. The stone patio adjacent to the cafeteria is used for various social activities by the school and the community. Both bus loading docks and bus storage space have been provided.

areas for swimming instruction and recreation, water pageants, and boating. Without undue expense, ravines can be utilized as outdoor theaters for dramatic and musical events. Wooded areas should be preserved for nature study, hiking and day camping.

The economy of the community should be reflected in the school facilities, which should be for recreation and training. In farm regions, for example, the community school should foster agricultural technics in school and nonschool activities. Four-H club work, agricultural exhibits, and competitive and social events, such as county fairs, could utilize the community school.

The high costs of building can be justified if the school plant is used a great deal. If the community school



At Oak Lawn, Ill., the high school's football field is lighted by an eight-pole system, with 24 lights per pole. See site plan on pages 64 and 65.

houses many of the local facilities, the public is getting more for its tax dollar.

At the commencement of a building program, few districts can undertake the immediate development of all plant facilities. The primary need is for the building itself, and development of the grounds often lags. In recognition of this, the land planner prepares a master plan for the whole site as it will appear many years in the future and includes building additions, enlarged parking areas, football stadiums, and additional playfields that may not be a part of the immediate development program. The master plan assures space on the site for all anticipated needs and, of equal importance, shows the relationship of all of these various facilities to one another.

For example, service facilities and drives lie adjacent to the lunchroom, boiler room, shops, auditorium and gymnasium but not in a manner that would endanger foot traffic. Also the outdoor areas that are used frequently (all-weather court areas and physical education areas) are situated near the building. Athletic facilities are at a greater distance from the building because they occupy so much space and are used less frequently. Planning should be of such a nature that these relationships will be maintained after additions are made to the building.

IMPROVEMENTS PLANNED

The master plan, then, is designed to accommodate the school plant at its mature stage of development. Improvements of the site should be scheduled over a period of years as the need arises and as funds become available.

Gifts from individuals and groups aid the new school's financial picture. Bleachers, permanent grandstands, and floodlights might be donated by men's clubs and equipment manufacturers in the local district. Garden clubs can be interested in the beautification of the grounds. A sound public relations program can gain much for the school and save precious funds.

All public agencies are faced with the enormous costs that plague school districts. Many municipalities have sought to solve this problem by cooperative administration of lands and buildings. School buildings are situated on park properties to permit educational use of the grounds and recreational use of the buildings.

The architect and site planner usually begin the design phase as follows: study of data (topographic surveys, aerial photographs, program needs) and conferences at the site. After general use areas for the site have been mapped out cooperatively, the architect and site planner can pursue their own parts of the scheme—the architect commencing sketches for the building and the site planner laying out areas and outdoor facilities.

The problems which the site planner faces arise after the exact location of the building has been decided upon. This decision locates the building at some definite distance from property lines, in a certain position with reference to sun and prevailing winds, at

specified grades, with outlined locations for the gymnasium, auditorium, classrooms, service areas, and other units of the building.

The size of the site is presumed to be adequate, that is from 8 to 10 acres for the elementary school and from 30 to 50 acres for a secondary school (depending upon ultimate enrollment). The shape of the site that can be most readily developed is rectangular, but this does not preclude the use of other shapes. Normally, the most satisfactory location for the building is at one end of the site—reasonably near a street but set back far enough to be free from hazards, noise and dust. The position of the building with respect to sun and prevailing winds is, primarily, a problem of the architect, although occasionally the building must be oriented disadvantageously. Ill effects of sun and wind can be offset by the installation of a stand of trees or an artificial earth mound.

Outdoor facilities for physical education and athletics require a lot of space and proper orientation. The long axis should run in a north-south direction. Baseball diamonds are oriented in various ways in different geographic regions.

Topography and natural drainage are to be utilized, if possible. Sites that are excessively rough or steep can sometimes be terraced more economically than they can be leveled off. Terracing of physical education areas results in natural demarcation of areas, separation of age groups, ease of supervision, and uninterrupted activity.

Drainage is a basic consideration. If a slope has less than 2 per cent of grade, turf areas will be too wet for frequent use unless drains are installed. Athletic fields need subsurface drainage. Playfield areas should also be drained, especially if the fields are flooded in winter for ice skating, to make them usable in the early spring. Good drainage means more days outside for the students.

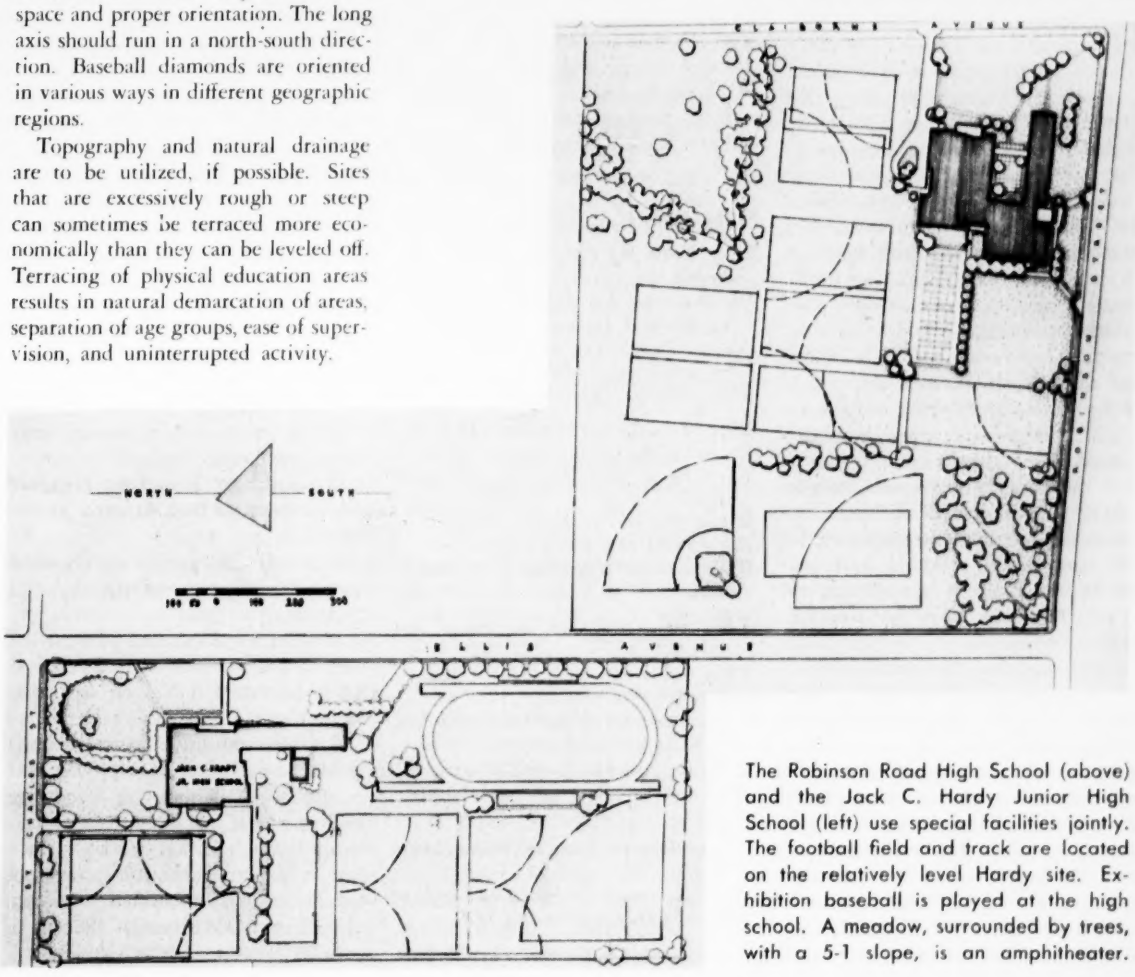
PROBLEMS OF ENVIRONMENT

The problems of environment and access at school sites have not, in most instances, been given sufficient attention. Too often the designer has failed to screen unsightly surroundings, failed to eliminate hazards or abate nuisances such as noise, smoke, dust, hot sun, and high winds. Just as it is possible to plan buildings to eliminate poor views, noise and other factors, so the site planner has technics with which to work. Service areas and drives should be situated at safe distances from the walks used by pedestrians. These facilities need not occupy the most desirable part of the site. Plantations can reduce noise, smoke, dust and wind and create a suitable environment on what would otherwise be a poor site.

Problems are presented if the land is stony or the soil is of a poor quality. Poor soils will result in stunted growth of trees and shrubs unless they are adequately fertilized. Soil preparation is important. Topsoil should be stripped and stockpiled prior to any earth work at the site and respread for turf areas and plantations.

Climatic factors should be considered in site planning. Drifting of snow, intensity of solar radiation, winds, temperature and humidity affect the uses and maintenance of outdoor areas. Grading, shade trees, windbreaks, and other means are employed to modify these conditions.

The foregoing is illustrative of the trend to solve, on a practical basis, some of the problems of land use and landscaping on the modern school site.



The Robinson Road High School (above) and the Jack C. Hardy Junior High School (left) use special facilities jointly. The football field and track are located on the relatively level Hardy site. Exhibition baseball is played at the high school. A meadow, surrounded by trees, with a 5-1 slope, is an amphitheater.

CHALK DUST

THE COFFEE BREAK

THE COFFEE BREAK is an ancient and honorable American tradition of recent origin which has gained enthusiastic reception from all groups. But to the school superintendent this pleasant folkway brings nothing but concern and alarm. It is not for him because if Mrs. Balter ever catches him at it he will rue the day!

Every day, from 9 to 5, America as a whole celebrates the Coffee Break. It usually begins at 10 a.m. and lasts until the juicier bits of gossip are made part of the record. But it is a lucky superintendent indeed who can slip and slup surreptitiously for five hasty minutes behind the school boiler while his secretary prevaricates as to his whereabouts. No matter how badly he needs to supplement his early breakfast, the Coffee Break is sure to arrive at the exact hour when he is diddling the telephone receiver in a one-way conversation not of his own choosing. Or, perchance, he is bandaging Cecil's cranium as a result of untoward playground activities. Or maybe he is attempting, without success, to dodge the educational salesmen who would wring the last drop of blood from his anemic budget. Or, could be, he is amending his amended curriculum so that the Sons of Butternut Breeches may be satisfied that it contains no controversial material, or anything else for that matter! Or, probably, he is polishing his monthly speech for the P.T.A. where so many have said so little so repeatedly and at such length.

Day after day the school administrator must adjure the Coffee Break because it is difficult to be telephonically coherent with a mouthful of hot java, and who has ever impressed his clientele while chewing a butter bun? The everlasting dignity of the school superintendent's office must not yield to the delight of a full stomach!

Some pleasant folkways there are where the leadership of the school administrator is welcome, nay demanded! He is allowed to participate in the Firemen's Annual Parade, he may give liberally to the Community Charity Drive, and on Arbor Day he may be master of ceremonies. He is expected to support all worthy community causes and solve all ways and means for financing them this side of slot machines! He may sponsor art exhibits and luncheons for celebrities.

But he must not participate in the Coffee Break. He should regard it in the same class as consumption of spiritous liquors, excess use of mild "darn its," and similar forbidden practices. If he becomes an addict of the Coffee Break, he may unconsciously give less attention to his basketball team, his tie, his fences, and his curriculum, and, with the price of coffee what it is, he will find himself broke and broken!

« »

FISH BOWL

They know my age, my weight, my height,
The battered hat I like to wear.
They know I lie awake at night
Because I'm losing too much hair.
They know my stumbles day to day.
Who knows? The local P.T.A.

They share the worries that are mine,
Rejoice at my good fortune, too;
They know each portent and each sign
When my accounts are overdue.
They know my every aberration.
Who knows? The Board of Education.

They know my step, my smile, my frown,
They sense my mood each passing hour.
They know when I am up or down,
When I am sugary or sour.
They know when I am fast or slow.
Who knows? The kids at school all know.

They know, yet knowing these things well,
They give me love and friendship, so
Just why this is I cannot tell.

Perchance, it is because they know.

IMAGINARY INTERVIEWS

The Earth Mover

There is a story about a teacher who in 1939 gave up his $1600 a year job to go into an earth moving business. Within a few years his business grossed $4.5 million a year. Moving dirt pays.—Extract from the *Teacher's Letter,* published fortnightly in Washington, D.C.

REPORTER: There has been considerable publicity, Mr. Mover, on your change from the teaching profession to the business of earth moving. How did you ever make such a change?

MOVER: Frankly, teaching the kids was a lot of fun, but I got pushed around so much by investigating committees, taxpayers' associations, boards of education, and the public that I decided it would be more profitable to do a little pushing of my own. Besides, I got moved from so many communities, I thought I would rather move communities than have them move me.

R.: What made you choose your present job?

M.: My nerves were so frazzled, I needed a lot of rest and quiet. In my earth moving job if an engine begins to knock I can always throttle it—but it is not considered good public relations to throttle visitors who complain to the superintendent.

R.: How does your present work compare with school teaching?

M.: It has much in common. Both of the jobs feature a lot of pushing and hauling and times when the dirt really flies around.

R.: Is earth moving easier than school teaching?

M.: Certainly! It is a lot easier to move mountains than to move school boards.

R.: I judge that you have also gained some pecuniary advantage by the change?

M.: Yes. I make about $4,498,400.25 more a year, and my laundry bill is lower because I don't need so many white shirts.

R.: Do you think other teachers would be successful as earth movers?

M.: Well, if they can keep one ancient school bus in order, they certainly won't have any trouble with a fleet of modern trucks. All good school superintendents by character, training, experience and necessity should be excellent movers.

Eva Luoma Photo, Cove Station, Weirton, W.Va.

RUSSELL LEWIS
Instrumental Music Instructor
Elementary Grades
Delano, Calif.

Teach Music for Enjoyment in Elementary Grades

Specialist's rôle is to give teacher self-confidence

THE century from 1800 to 1900 saw a rapid growth and acceptance of school music in the curriculum of American elementary schools, with emphasis being laid on the acquisition of technical skills by the child. About 1900 school music educators split into two conflicting groups—those who thought the child must learn how to read music before he could begin to "appreciate" it and those who insisted that much of the beauty of music could be imparted by enthusiastic teachers without necessarily forcing the child to go first through the drudgery of pages of formal exercises and sight-singing devices.

These two factions continue to the present day, and any realistic approach to the question of whether we want a specialist or a classroom teacher to teach elementary school music must relate directly to the objectives of music education, which must, in turn, be directly related to the entire school's educational philosophy. We must remember, also, that the idea of the "self-contained" classroom is no recent innovation but dates back to the Colonial dame school.

Decide first on desirable outcomes. If we regard music as a technical specialty, then the classroom teacher will normally be inadequately prepared to teach it. But if we say that the child's growth in understanding and enjoyment of music is basic and that technical skills are of comparatively minor importance, then the classroom teacher is in an excellent position to direct those activities that will lead to enjoyment and understanding of music. The specialist will still be needed to guide the classroom music teacher in methods and in selection of material, to stimulate and provide inservice growth in musical understanding, to coordinate the total school program, and to provide resource materials. This person will still be needed, also, to provide the specialized instruction for the relatively small number of children who have outstanding talent in music.

Specialist helps teacher gain confidence. Once an accepted definition of desirable outcomes in music has been stated we may discuss the pros and cons of our question with more understanding in relation to our own situation. Here is a brief summary of the arguments presented by those who would have a specialist teach elementary school music.

1. You can't teach it if you don't know it. No matter how enthusiastic a person is about music and its value in the classroom he cannot teach music without sufficient background to give him a feeling of security.

2. Supervisors of music tend to do all the *teaching* of music on their weekly visits, leaving the teachers to carry on as best they may for the rest of the time.

3. While it is true that any teacher can play phonograph records or lead an informal group in dancing to music, or even in some cases lead group singing activities, she will not be able to build skills and technics which the student will need when he reaches the secondary special music classes.

Classroom teacher encourages enjoyment of music. Let's examine these arguments one at a time. First, you can't teach it if you don't know it. Just what is meant by "it"? If we mean the technical skills of playing an instrument, such as the violin, or the ability to sight-sing a piece of music, then I would agree. But music educators everywhere are concerned today with the forgotten objective of enjoyment of music. Too often we will find students who have memorized certain *technical* aspects of music well and in the process have had their *enjoyment* of music snuffed out. Education is concerned with the changing of concepts, the development of the personality and character. Do we change a child's concepts of music by teaching him that *C* is on the third space of the treble cleff staff or that the key of *D* has two sharps? Too often the answer is Yes—we change his inborn love of music to a rejection of music.

The classroom teacher should enjoy music and desire her pupils to enjoy music. She is in an excellent position to help them enjoy it. She shares experiences with her children throughout the day, having many opportunities during that time to integrate music into other subjects, to make her music period flexible to meet the needs of the children, and to share her enthusiasm for music with the children in many ways. Con-

trast her situation with that of the music specialist who has a fixed period of 20 minutes two or three times a week in which to try to instill a love for music in the child. This piecemeal scheduling can nullify all that even an exceptional music teacher is able to accomplish.

No imitation music teachers, please! The supervisor or consultant in music should feel that it is his job to help the classroom teacher gain in the abilities and skills necessary to carry out her objectives. Never should the supervisor attempt to dictate methods or content to the teacher. His most important task is to give the teacher the self-confidence that comes from knowing what is expected of her and the feeling that she is capable of performing those duties. In no circumstance should the supervisor attempt to make an imitation "music teacher" out of the classroom teacher. The supervisor must remember that there are individual differences in teachers as well as in pupils and that no two teachers' abilities or needs are the same.

If we don't teach technical skills in the elementary classroom, then what *is* the classroom teacher to teach? A fair question, and one that must be answered, but it must be answered in specific terms by specific districts, through group action of the administration and teachers. Regardless of the answer, the program should be flexible, capable of meeting the needs of different teachers and classes of children. There are really few ways to express ourselves musically. We sing, listen, dance or perform some other expressive bodily movement, we play an instrument, or we create our own music. There is nothing here that need frighten a competent teacher. An intelligent teacher who desires to share her enjoyment of music with her class can do an excellent job if she is given the proper encouragement and guidance from supervisors and administration.

I have frequently heard complaints like this from high school music teachers: "They don't teach them a thing in the grades! Why, not a one of my freshmen could read a note of music."

I, too, have taught high school choruses and bands, and I must agree that students coming through the general classroom music program do not ordinarily possess a great deal of technical knowledge. However, I have always felt that *I* was being paid for doing something and that this was part of my job. Give me enthusiasm and appreciation for fine music and I don't care whether the student knows a treble cleff from a cadenza. I shall be able to help him learn more faster than I can help one who has spent so many hours on deadly sight-singing exercises and drills that his perception of the beauty in music has been killed.

SOME CHANGES ARE REQUIRED

I believe that the competent classroom teacher can teach music and do a better job of it than a music specialist who visits each class a few periods a week can do. This is going to require some changes:

1. The attitude toward school music must enlarge to include the *enjoyment* of music as the basic purpose in teaching it.

2. The supervisor will have to change his thinking about his rôle in the picture. No longer can he set up a "course of study" in music, then check to see whether it is being carried out properly. He must be willing to serve the classroom teacher, rather than act as her "boss."

3. This program will stand or fall on the attitude of the administrator of the school toward music education in the classroom.

Specifications for Purchasing Audio-Visual Equipment

A FORM consisting of an introduction and six specifications has recently been developed by a committee of suppliers and users in the audio-visual field. The form has been endorsed by the Department of Audio-Visual Instruction of the National Education Association and the National Audio-Visual Association. The members of these two organizations insist that encouragement be given to legitimate A-V dealers—those who give demonstrations and continued service.

The specifications are designed to make it possible for schools to buy audio-visual equipment from legitimate dealers and to ensure that they will receive good dealer service on their purchases. Administrators and purchasing agents who wish to ensure good dealer service on the equipment which they purchase may wish to incorporate the specifications in requests for bids on audio-visual items, Don White, executive vice president of the National Audio-Visual Association, said. The form follows:

The items of audio-visual equipment are of such a nature that individual delivery, instruction of operating personnel, and conveniently available repair service are essential to the efficient utilization of the equipment. For this reason, the following requirements are made:

1. The vendor must deliver the equipment unpacked, set up and ready to operate, and must check to make sure that all accessories, spare reels, line cords, and so forth are present and operable.

2. He must check the equipment at time of delivery to determine that it operates properly in the location where it is to be used.

3. The vendor must be prepared to furnish authorized factory repair service for the equipment, within the state of..... (or city of.....).

4. He must maintain in stock such consumable items (lamps, tubes, belts, and so forth) as are necessary to provide for the normal operation of the equipment.

5. The vendor must maintain or have immediately available within the state of..... (or city of.....) a reasonable stock of spare mechanical parts for the equipment.

6. The vendor must be prepared to furnish rental (or loan) equipment upon reasonable notice for use while this equipment is undergoing repairs.

Courts expect prompt action in

Making Board Minutes Public

LEE O. GARBER
Associate Professor of Education
University of Pennsylvania

THE question of whether school board records should be available for public inspection frequently plagues school boards. Numerous states have statutes, somewhat similar in character, which govern the matter.

In Utah the statute provides that "every citizen has a right to inspect and take a copy of any public writing of this state except as otherwise expressly provided by statute." In a recent decision, the supreme court of Utah, in applying this statute to a case involving the minutes of a school board, ruled that the board must make the record of a meeting available within a reasonable length of time after the meeting is held.*

The court also held that the policy of the board in not making the minutes available until after they were approved by the board at a subsequent meeting was unwarranted. This case is important because of its effects on boards and citizens alike and also because this is one of a few cases, if not the sole one, in which this question has been litigated.

ACTION BROUGHT

When a citizen, acting under the authority of the statute previously quoted, requested permission to see the minutes of a board meeting held the previous day and permission to do so was denied, this friendly action was brought to determine the applicability of the statute to the facts of the case. It appears that permission was denied because of an opinion received by the board from the state superintendent of public instruction who, by statute, is the legal adviser of boards of education in Utah. His ruling was to the effect that the minutes of a local board of education were not official until approved by the board and that the board was justified in establishing its own policy as to when the minutes should be made available to the public. In light of this opinion, the board, in this case, had established the policy of not making the minutes available until they had been entered in the official journal, following a later meeting at which they had been approved.

ARGUMENTS PRESENTED

The plaintiffs contended that the notes of the clerk or, at least, the transcribed record made from those notes for journal entry, and subject to board approval, constituted an "official writing" within the meaning of the statute. They contended that the record should be prepared and made available for public inspection immediately following the board meeting. The defendants argued that this procedure was dangerous, in that it might lead to public misinformation and to embarrassment because of possible inaccuracies in a record they termed tentative and unofficial until it was approved by the board itself and entered in the journal.

In considering this matter, the court made the following interesting commentary:

"The statutes and cases relating to public writings are divergent as the shading of the spectrum. . . . The contentions of opposing counsel . . . point up what frequently is true, that between two extremes, not necessarily midway, there is a point where reason shows brightest, dimming as the point shifts in one direction or the other. To hold that a public writing includes the unexpurgated scribbled notes of a clerk, legible, perhaps, to him alone, would be unreasonable, we think, and even might deify doodling. It would be unreasonable also to hold that any record made by the clerk short of approval by a board and placement in a journal is not a public writing. Such conclusions might deify dawdling."

As a result of its reasoning, the court held that a clerk's untranscribed notes are not classifiable as a "public writing" but that the transcribed minutes, awaiting board approval and placement in the journal, are. It reasoned that to consider the journal entry the only public writing "would attach a magic significance to the word 'journal,' and might repose in boards a power to act on matters of great public significance without opportunity for public scrutiny."

The defendants also argued that the need for inspecting the record was not immediate because the meeting, covered by the record, was a public one. The court ruled that this was not an adequate answer on the ground that "We cannot blind ourselves to the facts that many such meetings go unattended by the public, that no newspaper can have its agents at all of such meetings, and that no country editor can be in two towns or counties at once."

"REASONABLENESS" DEFINED

Having ruled that the minutes should be made available within a reasonable length of time after the meeting was held, the court found it necessary to give some idea of its concept of reasonableness. In this connection it said:

"We believe that what is a reasonable time to prepare a record of a public board meeting depends entirely on the facts of each case. If the board action called for the purchase of textbooks advocating communism, the record reasonably should be prepared for public release at once after the meet-

*Conover *v.* Board of Education, 267 P. (2d) 768 (Utah).

ing, while a resolution to dismiss school on Washington's birthday perhaps need never be documented—at least so far as one very important segment of the population is concerned—the children. . . . The time for preparation and dissemination would be directly proportional to the importance of the action taken."

Amplifying this idea, the court reasoned that a reasonable time for making the minutes available would be some time before any important action was to take place—that if they were made available only after the action had transpired, the information contained in the minutes would have little, if any, news value except "as it might be the basis for criticism of injudicious action."

Continuing its discourse on the matter of making the records of public bodies open to the public, the court said:

"The truth about the official acts of public servants always should be displayed in the public market place, subject to public appraisal. Any attempt to withhold information after a meeting itself should be a subject for wide publicity, irrespective of the fact that withholding it might prevent someone's embarrassment because of inaccuracy. Such inaccuracy may be reason enough to replace him responsible therefor, but most certainly is no reason for withholding information to which the public is entitled, nor to prevent the embarrassment of anyone; nor to perpetuate anyone in public office."

ONE ANSWER GIVEN

This case gives one answer to the question of when the records of a board of education must be made available to the public, where the statute specifically provides that they be made available. It does not, however, answer the question of whether such records must be made available in the absence of a statute requiring it. Few, if any, cases involving this specific question have come before the courts. It would appear that if such a question did arise, a good case could be made for requiring that the minutes be made available, on the ground that a failure to do so would not be in the interest of public policy. Certainly, a school board that desires to maintain good public relations with its patrons and taxpayers will not refuse to make its minutes available but will, instead, publicize them where possible.

National Pride and Clergy Rule Public Schools of Eire

Second letter from HAROLD G. SHANE

SINCE last month's letter from London, the family and I have driven across France and have spent the last month visiting schools in Switzerland, Austria and Germany.

Until recently, when we enrolled the children in Swiss schools, it was particularly fascinating to have them with us. The things they commented on were a continual delight. Shortly after we landed in France, for instance, Susan expressed great surprise because there were so many "foreigners" in Europe! At age 10 it required at least two days for her to realize that *we* were the *real* foreigners here!

In this letter I'd like to spend a bit of time on education in Southern Ireland (Eire), which proved to be especially interesting during the early days of our tour. (A clear distinction must be made between independent Eire and small Northern Ireland, which remains an integral part of Britain's United Kingdom.)

Of all the countries of consequence in Western Europe, Eire probably is one about which least has been written insofar as public education is concerned. This lack of attention may well be due to the fact that the little island is off the beaten path both for the majority of tourists and for those who are interested in a serious study of comparative education.

Or it may be that the friendly Irish and their beguiling country manage to absorb all of the visitor's time and interest before he has an opportunity to examine the schools. Such things as the beautiful, centuries old "Book of Kells," the world famous Abbey Theater Players, and the National Museum in Dublin compete vigorously for the traveler's time.

The imprint of circumstance and custom and the impact of history, old and new, seem to be of peculiar significance in Irish education, particularly in the southern republic. In other words, the culture of Eire has a great deal to do with the status of the schools and educational practices reflected in their curriculums.

The strong national pride of a recently independent country and its poverty, for instance, must be sensed before one can have even a limited understanding of the *instructional program.* The same comment holds true with respect to the strong religious elements—both Catholic and Protestant—which greatly influence *control* of the public schools. Another influence is the strong but diminishing power of social class which bears upon public *attitudes* toward education.

GAELIC REVIVED

The fact that Eire has, within recent memory, become an independent nation rather than continuing as an integral part of the United Kingdom under British sovereignty is a fact of significance in the educational program. As an expression of the "drive" of the Irish people for national identity, the Oireachtas—comparable to Congress in the U.S.—has decreed the revival of Gaelic as the national tongue. Thus, one finds today in Eire's primary and secondary schools that a complex and all-but-dead language is being revived in the younger generation. Ordinarily one would expect to find an "old" language in the possession of oldsters. In Eire the reverse is true. And many adult Irish are in the anomalous position of finding their "native" tongue spoken by their children rather than by themselves. Not only is Gaelic taught as a

---

Éiriġ, a Ṡeáin
(Seán rises),
Siúil go dtí an cóṁra
(Seán walks to the press).

GAELIC, an all-but-dead language, revived as national tongue in Southern Ireland. Creates barrier of communication between young and old generations. Schools mostly financed by national government. Curriculum sent out from Dublin. Parents sacrifice to maintain social distinction through child's education. By constitution, public education is free but not universal.

second language in a land becoming *artificially* bilingual; early in the primary school years Gaelic becomes the language of instruction. Thus the young Irish soon are learning their sums and geography lessons in the newly revived national tongue.

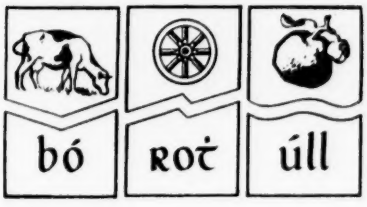
Conversations with parents and professional educators revealed that the teaching of Gaelic and *in* Gaelic is a warmly controversial topic. Some professors and teachers consider it nonfunctional and a "danger" as well. That is, a danger in the sense that the schools are creating artificially and arbitrarily a barrier to communication with other non-Irish peoples—none of whom use Gaelic as a language.

Some parents with whom I talked also were incensed because they felt that "it takes so long to learn Gaelic that there's not enough time for other subjects in the school."

CONCLUSION TRANSLATED

One barrister in suburban Dublin snorted that his child "had to copy his lessons in Gaelic, think through the questions in English, and translate his conclusion into Irish for the teacher."

Undoubtedly the bilingual emphasis has prompted some parents to enroll children in tuition schools. It also has complicated life for the teacher! The drawings I enclose are some of the reading materials used in the Infant School, equivalent to Grades 1 and 2 in the U.S., with which the teacher approaches the job of helping the child begin reading in his "native" tongue, a language he may be encountering for the first time as he enters school.



It would be highly presumptuous to criticize public education in Eire for its use of Gaelic—especially after a brief two-week visit. The future in any event will decide the wisdom of the practice. But I have tried to convey what is being done, the fact that the new bilingualism seems to reflect an attempt to achieve a new linguistic identity in Eire, and the apparent mixed feelings with which some parents and educators are reacting to the government's linguistic policy.

The religious heritage of Eire has created a unique situation with respect to the *control* of public education. In Southern Ireland there are no superintendency and no board of education such as have been commonplace in the U.S. The policymaking and direction of local schools in Eire reside almost exclusively in the hands of a "local manager" who is either the local priest or the local Protestant clergyman, depending upon the prevalent religious majority in the environment of a given school.

Curriculum planning, the employment of teachers, financial management, and similar responsibilities of U.S. boards and faculties thus have come, in Eire, to be in the hands of the village or neighborhood religious leader. According to the estimate of a representative of the Ministry of Education in Dublin, not more than a dozen lay school heads are to be found in the entire southern republic.

Education, despite the nature and extent of local church control, is relatively uniform in Eire. This similarity is due to the widespread use of a national curriculum sent out from Dublin and periodically revised. (Even music and needlework are the subjects of curriculum booklets.) At the same time, it must be noted that local initiative is encouraged in the application and interpretation of advice from the national Ministry.

Most of the funds for public education in Eire are disbursed through the national government. Theoretically, one-third of the school funds is to be raised from local taxation and tuition. In practice, most Irish schools do well to contribute one-sixth or one-seventh of their total budget.

Often misunderstood, frequently by the Irishman himself, is the fact that public education as ordered by the constitution is *free but not universal.* At present, children from 6 to 10 years *must* attend school only if they live within 2 miles of a school. Between 11 and 14, education is constitutionally compulsory only if there is a school within 3 miles of the child's home. Thus, some children in rural areas escape schooling entirely.

The religious orientation of public education, the national curriculum and financial support provided, and the unusual geographical limits placed on compulsory attendance probably impress the visitor from the States as basic differences between school organization at home and in Eire.

More subtle than the qualities previously mentioned as points on which U.S. and Irish education differ is the matter of class lines in Eire. Most of Europe, perhaps all of Europe, involves social groups of long standing. These range from the groups composed of the dwindling titled aristocracy to the groups of laborers who "draw the water and hew the wood."

"PROPER PLACE" ENSURED

In addition to the attitudes the Irish parent may have with respect to, say, Gaelic instruction or the religious foundation of his child's education are his parental views regarding social class. Many mothers and fathers who seek to be identified with the upper middle or upper strata of society seem to evaluate the schools with respect to the success of these schools in maintaining the dozens, perhaps hundreds, of attitudes and manners of speech which presumably denote one's social —and frequently one's economic— level. Many a parent cheerfully or resignedly pays substantial tuition for his child, at least for a part of his schooling, to achieve the personal demeanor the parent feels is imperative to ensure the child's "proper place" in society.

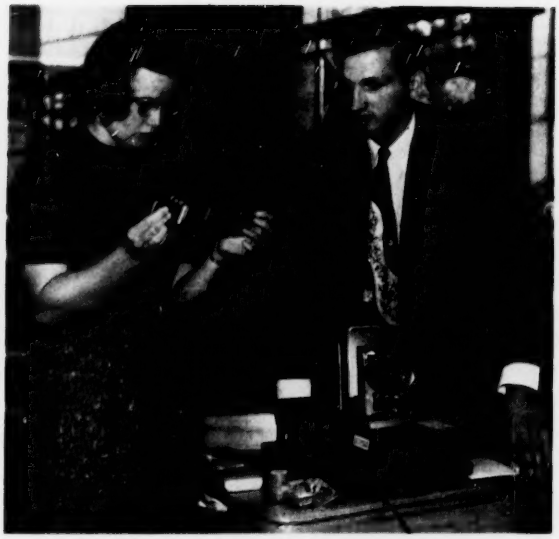
As always,
HAROLD

AUDIO-VIDEO

Set Up for Service

WANDA DANIEL
Curriculum Assistant
in Charge of Audio-Visual Aids
Public Schools, Grosse Pointe, Mich.

H. LEROY SELMEIER
Director of Instruction
Public Schools, Grosse Pointe, Mich.



On A-V building meeting night new teachers at Ferry Elementary School learn to run all of the equipment that is available in their school. This teacher is learning to put a 2 by 2 slide carrier on the filmstrip machine.

SERVICE is our business." To help teachers to carry out the plans they make with and for the boys and girls in our classrooms is a basic aim of the department of instruction at Grosse Pointe, Mich. Space is of some importance, but a desire to provide needed materials and ideas must have top priority. With this ideal we make the available physical facilities satisfy us.

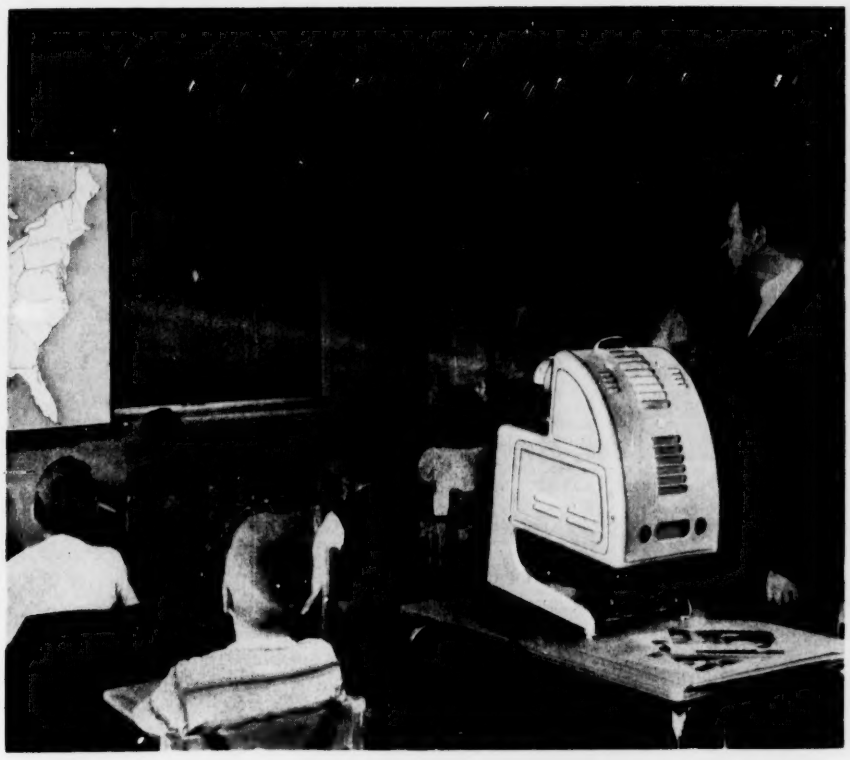
In one of the two old school buildings that house the administrative offices of the Grosse Pointe public school system, the second floor has become the home of the department of instruction. When constructed almost 50 years ago this second floor consisted of two classrooms, a large hall closet, and a stairway. To serve our purpose the classrooms have been partitioned into smaller rooms that now are used for consultation, office and storage space.

One classroom has been partitioned so that it not only contains the office of the departmental secretary and director but also has two available service rooms. One of these is used to house our recordings library and is also so set up with equipment that one or two teachers at a time may preview such A-V materials as they wish to consider for use. The other room is so equipped with tables and corkboard walls that displays can be arranged and utilized by small committee groups working on various instructional projects. In this room a series of file cabinets provides storage for many thousands of flat pictures.

The hall closet and the other former classroom are subdivided into three small offices and a library. In one room a clerk books and inspects each film in our system library before storing it in its proper place in steel cabinets. Periodically lost parts of films are reordered, and films are freshened.

At a tea given in the department of instruction's offices, new teachers look at the instructional materials. In this room are bulletin boards as well as display tables.

Inservice training courses are part of the instructional services. During one class 38 teachers enrolled in an A-V course learned to thread motion picture projectors.



Beseler VU-LYTE Representative demonstrates to Principal and Executives in classroom at Levittown Memorial High School, Union Free School District #5, N. Y. Schools find a constantly growing need for additional VU-LYTE Opaque Projectors. Lessons are learned quicker, easier, better with the VU-LYTE.

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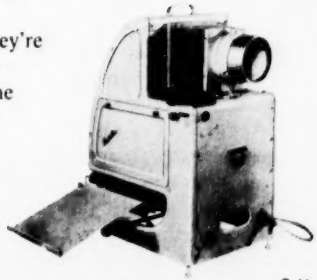
Proves This Teaching Method More Effective!

Opaque Projection with the VU-LYTE is one of the best methods known to communicate ideas, get facts across so they're remembered. Every day, Educators find more proof that this teaching tool is the most effective they have ever used!

- Pupil participation is heightened
- Classes take on a new interest
- Subjects are easier for pupils to learn
- Information is retained longer
- Lessons are remembered with greater accuracy
- Discussions are more lively



The Projector with the Built-In Pointer I

With the Beseler VU-LYTE, anything can be projected in its natural colors. Pictures, books, maps, solid objects diagrams, newspaper and magazine clippings, homework papers . . . anything that the Teacher thinks will help the students. No preliminary preparation of material is necessary.

If you are interested in quicker, better learning, mail the coupon for a Free Demonstration. You'll be amazed at how the VU-LYTE gives expression to your full teaching potential. Of course, there is no obligation.

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Please arrange for a Free Demonstration at my convenience.

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School_____

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These boxes are filled with instructional materials ordered by teachers. Each box is filled for an individual. It may contain library books, flat pictures, or filmstrips. Recordings and reels of film are sent to schools in larger packages.

A second small room is used by another clerk to fill requisitions sent in from the various schools for filmstrips, flat pictures, slides and library books. In this room we also keep our small museum. In the final office the curriculum assistant in charge of audio-visual aids has for ready reference our library of audio-visual books, catalogs for children's literature, and other library books, as well as a single copy of all books available for use as a supplementary set in our schools.

Adjacent to these rooms is our departmental library, which supplements the libraries of the various elementary schools. On its shelves are children's books pertaining to many areas. In addition to these materials we have a bookroom in the basement of the building where 20,000 supplementary books are stored. Upon request, and after the single copy available in the second floor library is checked over, any number of these books may be sent to the teachers. Social studies, art, science, English, health, spelling and literature books are included in the 396 titles available for the teachers.

CONVENIENT FOR MEETINGS

The department's library on the second floor has been so arranged as to be convenient for the holding of many kinds of meetings. Since the windows have opaque draperies, groups of teachers preview nearly all of our audio-visual materials here. Planning committees, curriculum groups, textbook committees, our philosophy workshop, the A-V coordinators are among the many groups that meet with us. Sometimes teachers browse through these materials after school or during the school day when substitutes are provided for those working on a special project.

At the present time our department owns and is distributing over the school system approximately 250 sound films, 1000 filmstrips, 1200 recordings, 20,000 flat pictures, 200 museum articles, 2000 slides, 3500 library books, and 20,000 supplementary books. Maps, globes, basic texts, and the equipment that is needed to use the previously mentioned materials are owned by each building. The general budget also provides funds for renting additional films or other materials.

MATERIALS AVAILABLE

We try to make our materials as available as possible to the schools. A-V materials and methods are means and not ends, so we believe that they have value only as they successfully serve our educational purposes. We also feel that the service we offer on the local level enables us to attain the ultimate goal of good classroom utilization of all instructional materials. Our policy permits teachers to send in a written request for materials at any time during the month. (We generally encourage them not to plan further than a month in advance.)

If teachers want something on short notice, they may telephone the department, and we try to send it to them on the next delivery. Our school trucks deliver materials to the secondary schools daily and to the elementary schools at least every Tuesday and Friday. This is supplemented by a daily delivery and pick-up service of films in all schools between 3:30 and 5 p.m. each day. The driver of the truck ends his daily run by stopping at the post office to mail back to the film libraries the rented films that were used in our schools during that day.

The booking forms that we use for our materials are functional. The teacher gets a confirmation as soon as her request has been booked, and she knows she can plan the use of these materials during a specific day or period.

In the elementary schools suggested "Units of Work in the Core Curriculum Program" are available for each teacher. These units were written by teachers who had been given released time during the school day to work in our department. Each unit offers a variety of suggestions to help teachers plan the best sort of educational experiences. These units include lists and definitions of such supplementary materials as films, filmstrips, flat pictures, recordings, slides and books.

EDUCATIONAL TRIPS

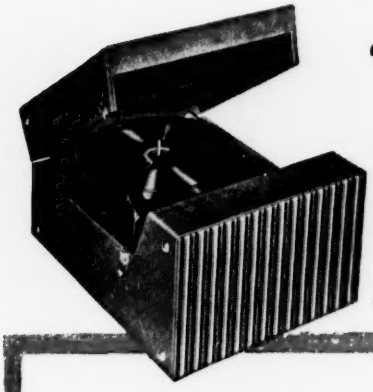
Among the many other manuals that are available to the entire teaching staff on a one-per-teacher basis are the audio-visual and the recordings manuals. A booklet of "Suggestions for Educational Trips" is also available. Since we do not own a school bus, we use budget funds to charter public buses for the many educational trips that we feel are necessary for a well rounded instructional program.

Early in the fall the principals set aside one of their building meeting nights to talk about "why" audio-visual materials are used in our instructional program. At this meeting all equipment is set up and the audio-visual coordinator for that building teaches all new teachers how to run the equipment. Because of the interest of the parents in this part of our instructional program, nearly every school has also demonstrated audio-visual materials at an evening P.T.A. meeting. Recently in the Kerby Elementary School the parents became so interested they had a fair and donated $1500 to the school to buy draperies and permanent screens for many of the classrooms.

A good illustration of A-V technics in use is to be found in the series of demonstrations which James W. Bushong, the Grosse Pointe superintendent, set up at the regular board of education meetings. How audio-visual materials are used in Grosse Pointe schools was one of the first presentations. At this meeting the audio-visual coordinators demonstrated and explained the unique values of such teaching aids as the motion picture,

Your Students Deserve the Best

In Audio Visual Aids



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Model 2ES38. An ideal school portable, with 8-inch speaker.

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filmstrips, slides, flat pictures, recordings and tape recordings. They also demonstrated the uses of the bulletin board and the chalkboard. With the greater understanding that ensued from this demonstration, our newer schools have now been planned so that all classrooms will be darkened with plastic draperies, and they will also have permanent screens in order that all instructional materials may be used within the classroom.

The audio-visual coordinator in each school helps us in many ways. Meeting once each month, a committee of the coordinators has helped formulate policies and procedures. By working with the principals and the audio-visual coordinators, who in turn work with the staff within each building, we think that we are helping develop the climate of interest and support which every audio-visual program needs for healthy growth.

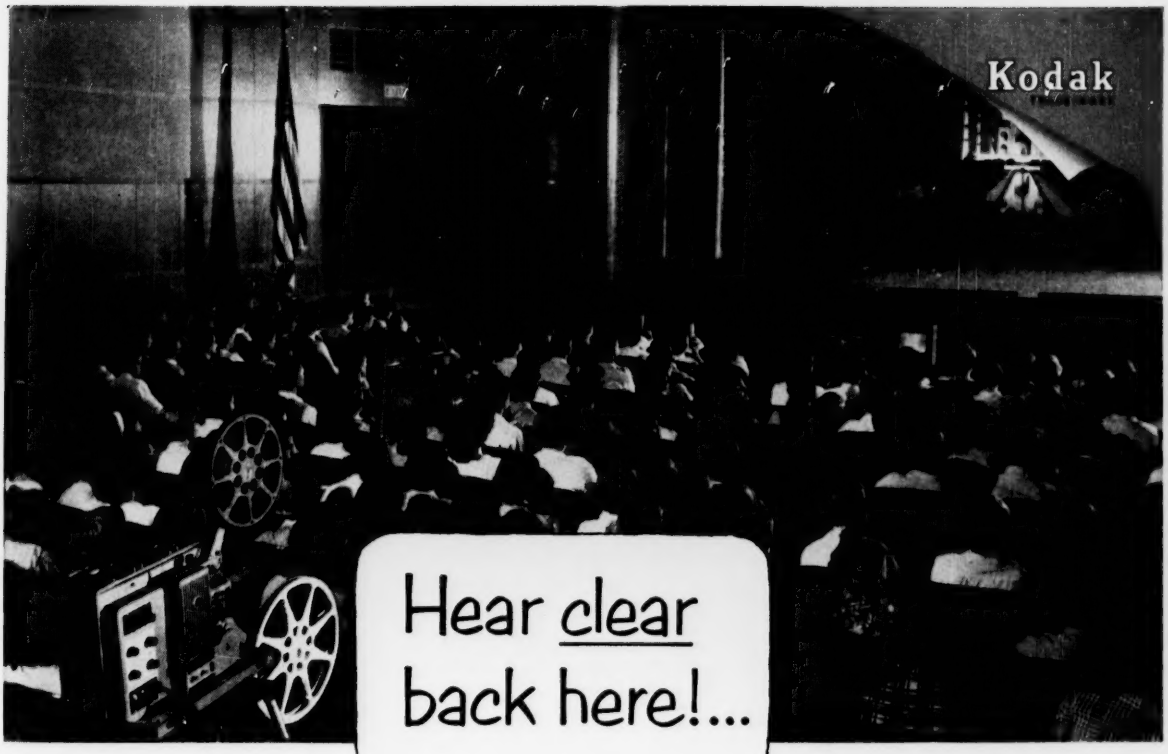
KIT FOR NEW TEACHERS

At the beginning of each new year, at the request of the principals, each new teacher finds in her room a kit consisting of materials that will help her start out the new year. These materials usually consist of flat pictures which may be used on the bulletin board, library books, and supplementary books. From the reactions we have had from many of these new teachers we feel that this has proved to be helpful.

New teachers are also helped to get started through a series of complimentary bus trips around the metropolitan area so that they get to know the community better and realize something of the local resources available for use.

In addition to the opportunity to visit in classrooms around the system, the new teachers always have a number of workshops during the latter part of September where they can get the kind of help, the questions answered, or other needs met that will make them happy members of the Grosse Pointe team.

A series of slides that show how our department functions is available from the department of audio-visual instruction of the N.E.A. These slides have an accompanying tape which is narrated by our superintendent. In this he extends an invitation to anyone who would care to visit us. We should like to join him in saying, "Why don't you come and visit us sometime—you will always be welcome."



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And when conditions require specialized sound distribution, that's easily available, too. The Kodak Multi-Speaker Unit—three matched 8-inch speakers in a single case—inexpensively converts the Pageant into a 4-speaker sound system, capable of coping with virtually any acoustical condition.

You have full control over the quality of sound reproduction, too. Separate bass and treble controls enable you to compensate for the "boominess" or "deadness" of a room. And the unique Fidelity Control lets you precisely focus the sound-scanning beam to make the most of any 16mm. optical-sound track, regardless of its position.

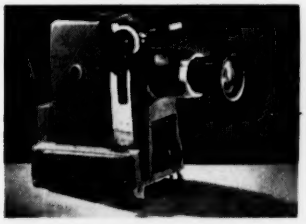
And that's not all . . .

Visual quality to equal the excellence of the sound is provided by a field-sharpening element built right into the lens. Matchless dependability and convenience of maintenance are assured by permanent pre-lubrication, an exclusive feature with Kodascope Pageant Sound Projectors. This completely eliminates the danger of under- or over-oiling, chief causes of mechanism breakdown. And amazingly quiet operation is the happy result of some ingenious new departures in projector design and construction.

Best of all, perhaps, you pay no premium for Pageant excellence. There are six different Pageant models designed to meet varying 16mm. projection requirements . . . and each is remarkably low in price! The Kodascope Pageant Sound Projector, Model AV-151, is only $495 complete with separately cased Kodak De Luxe 12-inch Speaker. And other Pageant models start at just $425.

Your Kodak Audio-Visual Dealer will be glad to help you choose a Pageant that fits your specific needs exactly. Or just mail the coupon for more detailed information.

Prices subject to change without notice.



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"Our experience indicates clearly that hit-or-miss lubrication is the chief cause of damage to school projection equipment. The Pageant Projector's permanent pre-lubrication totally eliminates this problem—and we're happy to endorse it."

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"The main problem in the use of 16mm. sound equipment is maintenance. The primary maintenance problem has been over- or under-oiling. Because the Pageant eliminates this difficulty, it is becoming the most popular projector in the field."

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Arax Photographic Company
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Please send name of nearest Kodak Audio-Visual Dealer and information on Kodascope Pageant Sound Projectors.

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(Zone)

12-62

What the Business Manager Should Know About Cafeteria Operations

RICHARD FLAMBERT
Food Services Consultant
San Francisco

SCHOOL food service has come of age. It is big business. In 10 years' time, the number of schools with feeding programs has increased 85 per cent; nearly 10 million children participate, and more than a quarter of a billion dollars is spent yearly for food in the nation's schools. When the feeding of children is undertaken as a business enterprise, with due regard for the educational and nutritional factors involved, it will succeed. When it is done as an unwelcome necessity or with lack of understanding of children's needs it will fail.

All school feeding programs are different: different in area, in philosophy, in personnel, in size, in methods, in layouts, and in policy. However, they all have one thing in common: the serving of the best food possible at the lowest cost. Some of the weaknesses of feeding programs we have found are:

1. Lack of clearly defined objectives and methods of their attainment.

2. Lack of clearly defined lines of authority.

3. Lack of uniformity in assessing charges against the cafeterias, in the handling of cash, in methods of control, and in accounting procedures.

4. Lack of preservice and inservice training for employes.

5. Lack of keeping up with trends in design, equipment and food preparation.

6. Failure to ask the advice of people with practical knowledge and experience when new cafeterias are planned or old ones are remodeled; equipment is installed or recommended by architects, contractors and supply houses rather than by school cafeteria experts.

7. A universal feeling of frustration on the part of cafeteria managers and supervisors—yes, even business managers and superintendents.

From a paper presented at the 40th annual convention of the Association of School Business Officials of the United States and Canada, Los Angeles, October 12.

TWELVE RULES

With these things in mind, there are several things a business manager should know (or learn) about cafeteria operations:

1. He should know how to interpret and evaluate cafeteria profit and loss statements. How are food and pay-roll costs arrived at? What should they be? If higher (or lower) than normal, what can be done about it? This presupposes some knowledge of cost control and food preparation.

2. He should know how many meals are served per man-hour of labor, in comparison with other districts, and take steps, if necessary, to increase productivity. We have found that districts, serving approximately the same kind of food, vary from seven to 17 meals per man-hour.

3. He should know the difference in cost, maintenance and educational value of plastic and china, paper and glassware, silver and stainless steel, and when the use of each is indicated.

4. He should be sure that a recipe is used for every batch of prepared food and that purchases are made by specification.

5. He should be sure that portions are controlled and precosted.

6. He should be sure that cafeteria policies are planned for the sole benefit of the students. Too frequently have these programs been taken over for and by school personnel and faculty.

7. He should have prepared daily food and pay-roll cost forms and see to it that they are submitted to him daily by the food service staff.

8. He should call frequent staff meetings with the supervisory cafeteria personnel for discussion of day-by-day problems, and these meetings should not be in the nature of a monologue or lecture by the business manager.

9. He should keep informed of federal, state and local regulations regarding subsidies and other forms of outside aid.

10. He should read food trade publications.

11. He should have some technical knowledge of food service layout and equipment. He can acquire this knowledge by visiting equipment houses and learning what each piece of equipment is supposed to do, and why. He should examine the layout and equipment in the cafeterias in his district and compare them with the layout and equipment of cafeterias in other districts.

12. Most important, he should institute a check list, in the form of a questionnaire regarding all phases of physical layout, sanitary conditions, food preparations and service, and other related matters. This check list should be filled out periodically by him, together with the cafeteria supervisor or manager, and necessary improvements should be implemented. Some of the questions on the list might be as follows:

What is the principal's opinion of the food service organization? Is he satisfied with the method of hiring employes, the quality of food and service, the price schedules, the personnel? How would he improve the program? Does the district subscribe to national

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and local trade and school magazines and are these publications accessible to the cafeteria personnel? What do cafeteria funds pay for? What do district funds pay for? How is cash handled, verified and reconciled? Who does the banking and how often? Are profit and loss statements issued regularly? How are food cost and pay-roll cost determined? Can accounting procedures be simplified? How much bookkeeping does the manager do? Too much?

How are teachers assigned to cafeteria duty? Is the system satisfactory? Is special consideration given to faculty? At the expense of students? Have you ever written to parents soliciting suggestions regarding cafeteria policy from them? Is there competition from off-ground eating places? If so, what is being done about it? Are competitive sports and club activities encouraged during the lunch period? Are any free meals served to other than cafeteria employes? Is there future buying? How is food purchased and ordered and delivered? How many meals are served per man-hour? What is the percentage of participation? Is it satisfactory? What is being done to increase participation? Is the lighting good and is the color scheme attractive in the kitchen and dining room?

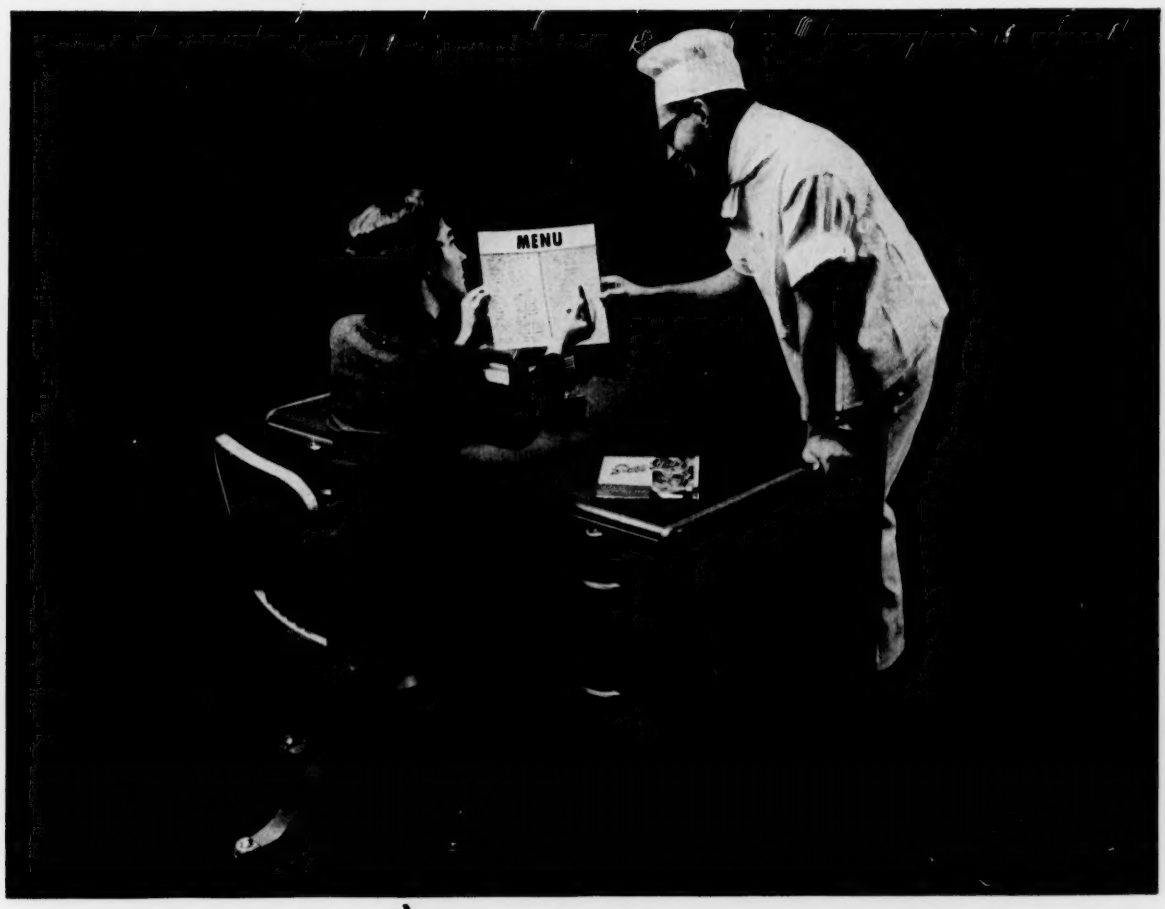
Is food locked up at night? Have standard recipes been set up on cards for all food preparation? Are they being used? Are all dishes costed and are costs kept up to date? Are scales used for all receiving, baking and cooking? Has the purveyor been requested to instruct employes in the proper use of detergent in the dishwasher? Are work schedules planned and are the duties of individuals clearly defined? Is the equipment kept clean? Are glasses and dishes free from stain and chipping?

What does each manager think of the present method of purchasing, receiving and handling of cash and accounting records and of her layout and equipment and help? Is she competent to judge quality in food and to manage help? What would make her happier in her job? Are opinions and suggestions of employes solicited? What is done regarding employe training, promotions, vacations, insurance, increments, overtime?

IS EVERYTHING BEING DONE?

Are you satisfied that everything that can be done to create an outstanding food service program is being done? What would you do to improve it?

A major cost of food service operation is pay roll. Regardless of whether a district pays all or only a major part of all salaries from cafeteria funds, it is necessary to do all possible to keep pay-roll costs down, not only to save money but to enable the district to serve better food at lower cost to the child. In California, frequently the pay-roll cost is higher than the food cost, an astonishing phenomenon, considering the fact that 10 years ago it was the custom for the pay-roll cost to be just one-half of the food cost. Because of this fact, a new concept of building a food service establishment was worked out by our organization for individual cafeterias. It is literally building a cafeteria around the workers. It is first necessary to determine the A.D.A. and then to establish theoretically a participation percentage. Assume that in an elementary school the enrollment will be 600 and that 30 per cent of the children will eat in the cafeteria, plus faculty and other school employes, or about 200 meals per day. At an average of 25 cents per meal, a



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revenue of $50 per day will accrue. If a 40 per cent pay-roll cost is desired, then $20 per day can be allocated to it. If the average hourly wage scale is $1.25, you may employ 16 man-hours to serve these 200 meals, or 12½ meals per man-hour. It might be well to employ an eight-hour manager, a six-hour assistant, and a two-hour helper for the cafeteria.

It is best to set up a type of meal pattern and then to determine what equipment will be necessary to turn out the kind of food desired, with 16 hours' being used daily. For example, if prefabricated meats, prepared mixes, and frozen foods are used a different kind of food preparation and storage equipment will be required than if these types of foods are not used. The whole theory of building a kitchen to fit a program is to utilize every labor-saving device possible, without, however, loading up a kitchen with expensive gadgets, which take more time to operate and keep clean than is saved by their use.

Among the laborsaving devices are carts, equipment on wheels, garbage disposal machines and prerinses, pot and pan washing machines, mechanical dish, glass and can washers, automatic ice makers and crushers, vegetable cutters, peelers, grinders, food warmers, juicers, combination steamers and kettles, tray conveyors, hamburger molders, endless belts, aluminum foil, polyethylene bags. The list is endless.

Another method of cutting cost is through large scale production and distribution. The cost of building, equipping and operating a school cafeteria continues to mount, with no end in sight. The average cost of elementary school cafeterias in 1953 was $77,000 for the building and equipment; for secondary schools the cost averaged $138,000. This investment and expense is for a project in which an average of 40 per cent of the A.D.A. participates and which is in use for a relatively short period of time each day.

This is in addition to the growing tendency to install larger and larger kitchens—and more and more equipment—and bigger and bigger dining rooms—all this for a 10 hour a week food service program. Because of this central kitchens have become more and more popular. They are a scientific method of bringing good food to the child at the lowest possible cost, but they must be operated efficiently, with cost control and new purchasing and preparation methods that must be worked out *before* the installation of a single piece of equipment.

CENTRAL KITCHENS

What are central kitchens? They are areas where food is prepared not only to be served in connection with a dining room in the same building but also to be transported to another school or schools for service there, or they might be in a separate building, where all food is prepared for service elsewhere.

As more schools are added to the receiving end, the cost of production goes down through volume buying and production. However, these meals have to be transported in special equipment in a special truck, and someone in each location has to receive the cooked food, and to receive and distribute the milk, ice cream, and possibly the bread arriving at the school. It requires split second production and transportation and cost control procedures. While savings are presumably effected in building and equipment costs in the receiving schools, added expense is obvious in the installing of special and

additional equipment in the central kitchen itself.

The principal advantages of central kitchens for the preparation of food for service elsewhere are (1) closer supervision is possible; (2) more meals can be prepared and served per man-hour; (3) centralized purchasing and accounting are possible; (4) better use of laborsaving devices and equipment is possible because of large production; (5) there is better distribution of labor; (6) closer control of food and portions is feasible; (7) recipes and food are uniform; (8) inexperienced women can be employed; (9) money is saved through the use of simple equipment in the receiving schools.

The principal disadvantages are (1) lack of trained supervisory personnel for mass production; (2) lack of a personal touch in the receiving schools, with its dehumanizing atmosphere, simply because of its efficiency; (3) lack of enthusiasm on the part of the school personnel; (4) large initial expenditure for equipment, carts and trucks; (5) sometimes fewer savings than have been claimed.

One of the new methods now employed to serve large numbers of students in a short space of time, with plate lunch, à la carte, or snacks, or any combination of these, is the "square" type of food service. Our firm is perhaps the leading protagonist of "squares" for junior and senior high schools and colleges, though not for elementary schools, at least not yet. "Squares" are a combination of a grocery chain store, a snack bar, and a regular school cafeteria. They allow students to select their food from counters or islands, without waiting in line or pushing trays along a tray slide. They have developed into the most satisfactory method of serving large groups of students that has yet been devised.

HOW "SQUARES" WORK

How do they work? Students come into the serving area, which is laid out in a square shape, through turnstiles at each end of the room, advance to the center of the room, where there is a table, from which they pick up trays, and proceed to the food counters, which line up on three sides of the square. They help themselves to salads, sandwiches, desserts, ice cream, beverages, milk shakes. Hot foods are served by attendants. When the student has what he needs, he proceeds to go into the dining room, by way of cashiers, picking up silver and napkins just before going by the cashiers.

Time and motion studies reveal that an average of eight students per minute pass the cashier. With four cashiers, 320 students are served every 10 minutes. It takes 25 square feet of area for each foot of counter. The preparation kitchen is usually on two sides of the "square" and the counters are replenished either from pass-throughs or by carts. Staggered or multiple feeding programs are naturally desired to relieve the possibility of a thousand students trying to get in at the same time. Incidentally the movement into the "squares" is controlled by the cashiers, with electric turnstiles, to prevent confusion.

Speaking of confusion, the question asked most frequently is "Isn't there confusion in the milling around of people going from one island to another with trays and food?" The answer is "Yes, for one day." After the first day, it becomes routine to the student. We do advocate, however, that the principle of this type of serving be explained to the student body before the "square" is opened.

Advice from a school board president:

Know-How's Expected From Business Administrators

(A.S.B.O. convention report continued from page 53)

SOME straight-from-the-shoulder advice from a school board member was delivered by a clergyman and former board president, the Rev. James M. Malloch of Fresno, Calif.

Dean Malloch declared that a school board expects business, legal, political and educational know-how on the part of its business department.

"A business manager has to have the know-how and experience of a successful businessman, without any possibility of earning as much money as a businessman," he said. "This means dedication, sometimes a sacrificial dedication, to the cause of education. A competent school business executive could make more money in private business than in his chosen public enterprise. This means to my mind that every business manager should have tenure corresponding to the tenure of teachers. He represents a new factor in the economic order besides private ownership.

"A business manager needs to have not only a working knowledge of school law and pertinent business law," continued Dean Malloch, "but also sense enough to consult his legal adviser constantly, and invariably when the possibility of litigation might exist. Without professional legal advice, a business manager can be sure neither that he is aware of existing laws nor that he is thinking in terms that would be recognized by the courts.

"Another job of a business manager," counseled the former board president, "is to play politics on a high level. If politics is a dirty business, it is so because the better people have not

Plans for 1955 were discussed by incoming and incumbent officers of the A.S.B.O. at their executive meeting October 14, following the convention. Standing (l. to r.) are: Herschel S. Brannen, assistant business manager and director of buildings, Houston, Tex., who was elected to a two-year term as a member of the executive committee; Percy M. Muir, business administrator, York Township Board of Education, Toronto, Ont., who fills out the unexpired term of the late T. Roy Noble and then continues for two years as a member of the executive committee; G. Alvin Wilson, in charge of business supervision for schools, Oak Park, Ill., who fills out the unexpired term of the late William C. Davini and will continue on the committee for a one-year term; Sam S. Dickey, assistant superintendent, Lakewood, Ohio, and 1953 president, who served this year as an executive committee member; Graham R. Miller, assistant superintendent for business services, Denver, executive committee member, and J. Harold Husband, director of administrative services, Grosse Pointe, Mich., executive committee member. Seated (l. to r.) are: A. C. Hutson Jr., assistant business manager, Knoxville, Tenn., newly elected second vice president; J. Wilbur Wolf, business manager and superintendent of buildings, Omaha, Neb., who advances to the first vice presidency; President Schuyler C. Joyner; President-Elect Frank J. Hochstuhl Jr., and Harley W. Anderson, Kalamazoo, Mich., secretary-treasurer.

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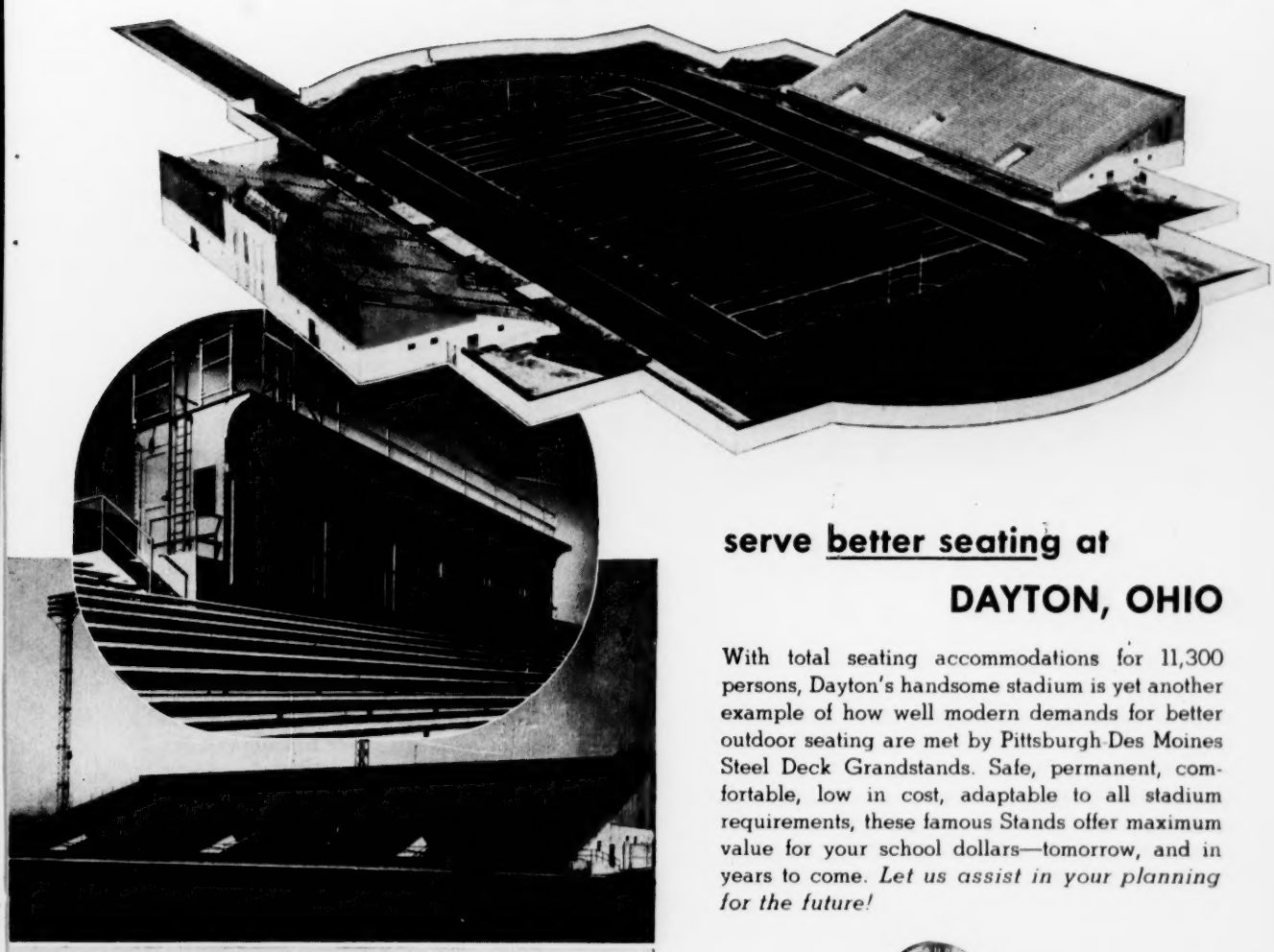
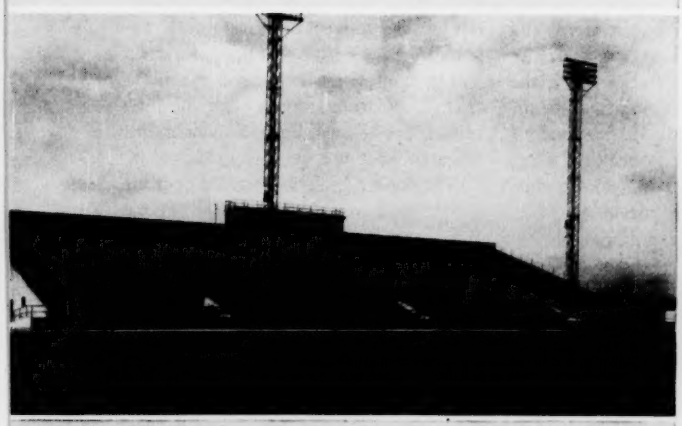


Top—the Dayton stadium layout. *Inset*—Press box, West Stand. *Above*—East Stand, capacity 5750.



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indulged in it. In a public school system, playing high-level politics means maintaining good public relations. This means maintaining good will on the part of principals and teachers toward the central office, good will of the business world toward the school system, and good will of the public which uses school properties.

"A business manager ought to know a great deal about what he is managing, the educational system. He must have the educational point of view. It is his function not to save money but to spend it wisely for what is needed in education."

REORGANIZATION PROPOSED

The current topic of interest and debate at the annual business meeting was the report of a special committee on the organization, functions and procedures of A.S.B.O. Declared the committee:

"The time has come when the Association of School Business Officials needs to expand and enlarge the basic concepts of the organization. The present structure is not adequately meeting the needs of the membership in terms of the professional development of the individual and in terms of service to school districts."

The committee spelled out several steps to increase the effectiveness of the association. The professionalization of school business management could be further promoted by the development of literature and performance standards, by improved contacts with other professional organizations and institutions of learning, and by efforts to recruit competent personnel through widespread publicity of job opportunities.

The association would increase services to its own membership through various publications, by providing a clearinghouse for the pooling of information, and by placing more responsibility in the hands of a full-time secretariat, which would include a full-time director for research projects.

In this way the committee believes the association will be able to provide services to small districts lacking technical staffs by recommending tests, specifications and plans and by supplying consultant services.

Eventually, too, the committee believes the association can blueprint a program of significant research that would merit funds from foundations.

The committee then proposed a number of changes in the constitution and by-laws to implement this expanded program.

Copies of the report had been sent to the membership of the association, with a balloting by mail for informal appraisal. The proposed program received 523 Yes votes, 20 Yes with reservations, and 6 No's.

The proposed changes in the constitution and by-laws to put this program into effect received 508 Yes votes, 18 Yes with reservations, and 9 No's.

It was somewhat a surprise (stated mildly) when a majority of those attending the business session voted to table the report for one year, except for one change. The change agreed upon was the elimination of the elective office of secretary-treasurer. Instead, the constitution was amended to authorize the executive committee to appoint a secretary. Later the executive committee appointed Harley W. Anderson of Kalamazoo, Mich., to continue in his post as secretary-treasurer until January 1, and from that point on to be employed as secretary on a month-to-month basis.

Comments from the floor and the gist of lobby sessions later indicated that the decision to postpone any further changes in the constitution for one year was by no means a lack of support for increasing the services and activities of the association. Rather, it was a question on the part of some of the veteran leaders of the group as to whether the finances and the staff of the association are adequate to attempt all of these new services and projects at this time.

PROJECTS CONTINUED

Meantime, the executive committee will carry on with several projects actually started during 1954. These include the setting up of specific research projects with eight research committees acting as advisory groups, the improvement of publications, the accumulation of a library of literature in the school administration field, the special work of the contacts committee in working with institutions of higher learning, and continued effort to establish an effective working relationship between the parent organization and 24 state or regional groups.

FOUR NEW STUDIES

The committee on maintenance and operation research, with Alfred C. Lamb, director of the division of buildings and grounds at Wayne University, Detroit, as chairman, reported in detail its findings on hot water tank linings. Its studies for the coming year will include: a comparative cost survey of coal, gas and oil as fuels, the comparative merits of electric hand driers and paper towels, the noise level of unit heaters, and the problem of slippery floors.

The committee sponsoring research on insurance problems, with Donald E. Gavit, business manager at Hammond, Ind., as chairman, suggested the following four areas for special study during the coming year: (1) accident insurance for pupils, (2) athletic insurance, (3) self-insurance, and (4) adjustments of fire insurance rates.

QUESTIONNAIRES QUESTIONED

The committee on research in the area of schoolhouse planning and construction prefaced its report with a well aimed blow at the solar plexus of so much research based upon questionnaire methods. Said the committee:

"We are firmly of the opinion that worth-while research cannot result from questionnaires, no matter how carefully prepared or answered. True research must be the result of proved and workable ideas."

The committee declared, "There has been no basic or consistent research in schoolhouse construction. Advances have been made as a result of the progressive thinking of a few architects and school building experts. . . . All business trends today clearly indicate that industries showing the greatest advances are those with the most progressive research programs.

"Much industrial research of the last few years is reflected in schoolhouse construction," the report continued, "especially since World War II. However, there are many specialized construction and planning problems that can only be solved through our constructive thinking and research."

The committee expressed the hope that foundation money can be obtained for establishing a continuing research program in this field.

The committee concentrated on four studies during 1954, with V. Harry Rhodes, commissioner of school buildings at St. Louis, as chairman and Norman J. Aaron, assistant superintendent for Fulton County, Georgia, and George H. Geyer, assistant superintendent and business manager at San Diego, Calif., serving as co-chairmen.

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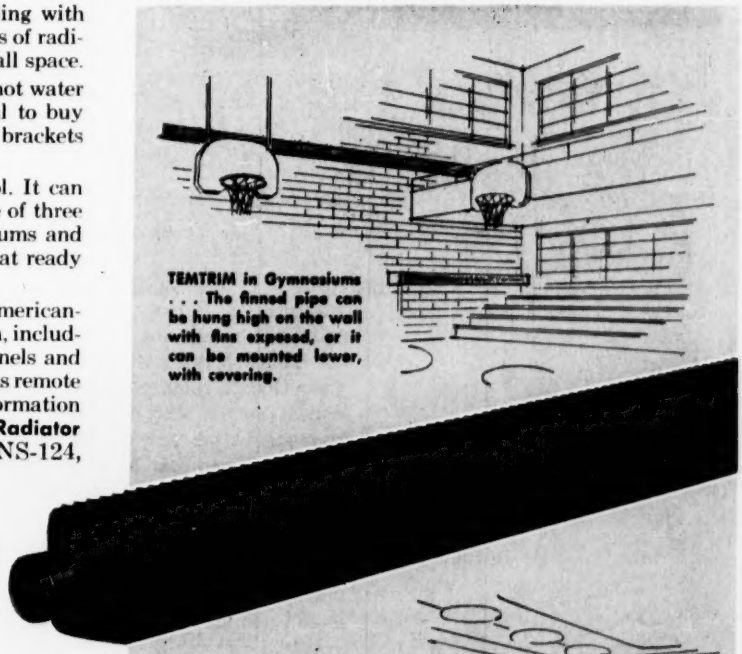
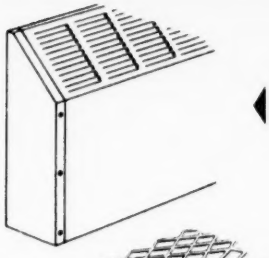
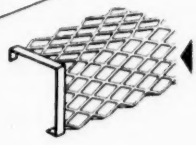


TEMTRIM has many fins to provide a large heating surface for big heat output.

TEMTRIM COVERS . . .



The sloping louvered cover is recommended for classrooms.



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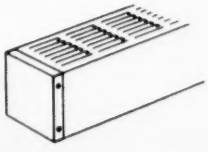
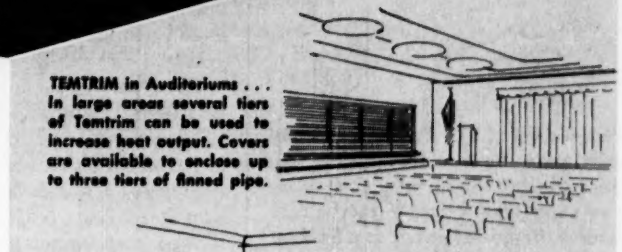


TEMTRIM in Gymnasiums . . . The finned pipe can be hung high on the wall with fins exposed, or it can be mounted lower, with covering.



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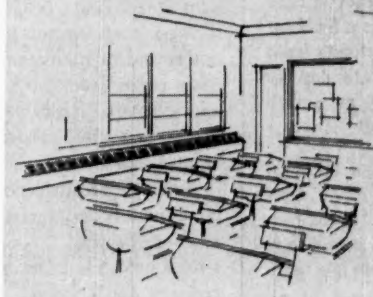

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The four studies were concerned with: (1) What constitutes a reliable unit for comparison of building costs? (2) The merits of one-story versus multiple-story building. (3) The purchase and maintenance of floor coverings. (4) The responsibility of boards in schoolhouse planning.

The research committee on transportation, represented by Ronald Cox of Sacramento, Calif., as chairman, asked the association to take under advisement the preparation and publication of a manual on pupil transportation. The committee would act as an editorial board for the publication.

SURVEY OF CAFETERIAS

The committee conducting research on school cafeterias gave a preliminary report of its findings based upon 90 replies received to date in its questionnaire survey covering 200 districts in the United States and Canada. From these data, the committee reported that student use of school lunch services averages 47 per cent in senior high schools, 51 per cent in junior highs, and 46 per cent in elementary schools.

Of the 90 systems reporting, 42 have a central storeroom, 11 have a testing kitchen, 37 have a lunchroom truck or district truck, and 74 participate to some extent in the federal lunch program.

The report, as submitted by Robert E. Reeves, chairman, of La Canada, Calif., revealed that only 20 per cent of the school districts reporting actually prepared a specific budget for their school feeding programs. It also showed that financing of the initial outlay and of maintenance and service costs came from both general funds and cafeteria funds, with no district supporting the program *completely* from either of these sources.

According to its report, this research committee on cafeterias of the A.S.B.O. is concentrating on six topics: (1) school cafeteria costs, accounting procedures, and financial statements; (2) purchasing specifications, standards and procedures; (3) personnel salaries, titles and qualifications; (4) cafeteria design, equipment and standards; (5) federal lunch program, accounting and procedures, and (6) menu planning.

CONTACTS WITH UNIVERSITIES

One of the major projects of the association during 1954 has been the work of the university contacts committee. This group of 21 members, working through state and regional associations, has sponsored a program of mutual aid with institutions of higher learning. This cooperative effort has included the fields of research, instruction, survey, counseling, inservice and on-the-job training and experience.

Typical of these efforts have been conferences and workshops sponsored jointly by state associations and universities, such as the programs this year at Purdue University, the University of Connecticut, Rutgers University, the University of Kansas, and Teachers College, Columbia University.

With a vision of unlimited opportunities for mutual assistance between A.S.B.O. and various universities in the field of practical research, the committee has been active chiefly in discovering problems worthy of special study. The committee published a 14 page bulletin listing practical problems for theses and dissertations by graduate students. Several instances were cited in which the committee has been of specific help to institutions of higher learning in the organization and enlargement of courses in business education and also in the establishment of internship programs.

Under the chairmanship of A. C. Hutson Jr., assistant business manager, Knoxville, Tenn., the work of the committee will be continued and expanded during the coming year, with cooperation also planned in the conduct of surveys, in the establishment of research centers, and in the planning of visitation programs.

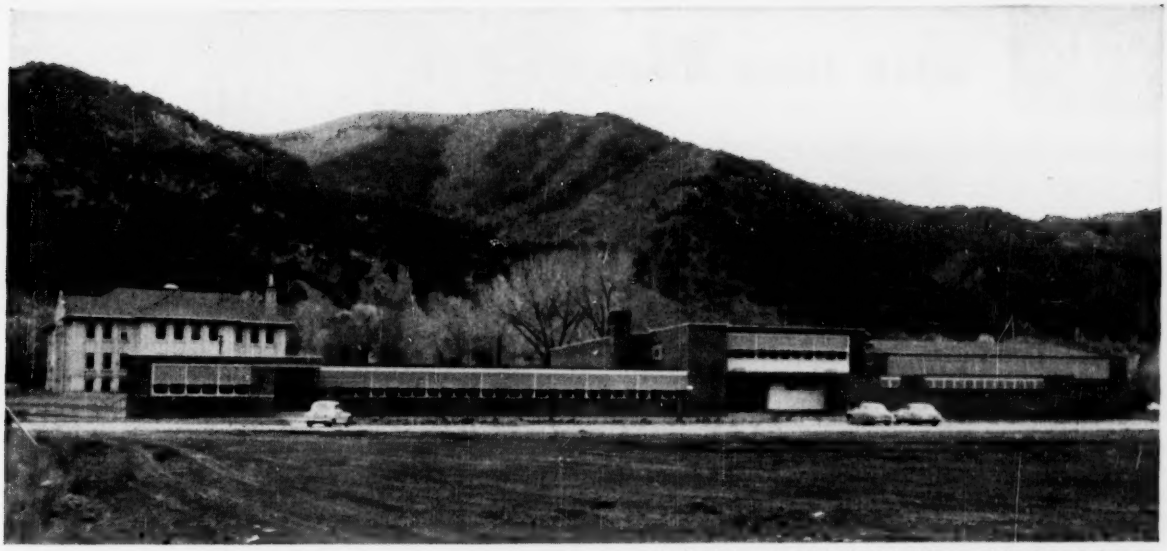
MEMBERSHIP NOW 1800

The annual report by the secretary-treasurer showed a balance on hand of approximately $22,000 as of October 1.

Membership in the association has now reached 1800, a gain of 12 per cent over the previous year, reported Everett Zabriskie, district clerk at Nutley, N.J., and chairman of the national membership committee. The goal for 1955 has been set at 2000. During the last five years the A.S.B.O. has been increasing its membership on an average of 10 per cent annually.

Resolutions expressing appreciation included mention of The NATION'S SCHOOLS for its special encouragement and aid to the association in promoting research.

The executive committee will meet in Chicago in February to outline plans for the next annual convention to be held in Chicago either October 9 to 13 or October 16 to 20.



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wire from Washington

By EDGAR FULLER

The new Congress

▸ With Democrats as chairmen of all congressional committees, but with the presidency, the Bureau of the Budget, and the Department of Health, Education and Welfare remaining Republican, no one can say definitely how education will be affected.

In the House, Graham A. Barden (D.-N.C.) will succeed Samuel McConnell Jr. (R.-Pa.) as chairman of the education and labor committee. Sen. James E. Murray (D.-Mont.) would ordinarily be the new chairman of the Senate committee on labor and public welfare, which handles educational legislation. It is expected, however, that Senator Murray will choose the chairmanship of another committee, leaving the labor and public welfare position to Sen. Lister Hill (D.-Ala.). Southern Democrats will head most other committees of importance to education in both House and Senate, and both majority leaders will be from Texas.

There are, however, some probabilities inherent in the shift from a Republican to a Democratic Congress. Secretary Oveta Culp Hobby and U.S.O.E. Commissioner S. M. Brownell will no doubt be granted thorough hearings on all issues, but their recommendations will count for less. Some legislation with widespread public appeal and bipartisan support in Congress, thus far held up by the Administration, may now be enacted. The 84th Congress may decide to include education more substantially in the record it will offer to the people in 1956.

All educational legislation will be closely examined to see whether it may affect the Supreme Court's proposed enforcement of its decision on segregation. Amendments are certain to be proposed by the several groups of extremists, but this has been common practice since long before the court's decision was announced. Such amendments were eliminated before passage from some laws now in effect, and there appears to be no justification for changing present policy. The segregation issue need not affect *new* educational legislation more than it affects the local-state-federal programs already in operation, but this will have to be made clear in regard to any such legislation in the 84th Congress.

New committee chairmen, such as Sen. Walter F. George (D.-Ga.) and Representative Barden, have been pioneers in vocational education and have their names associated with some present laws. This will make the Administration's program to reform the Smith-Hughes Act and its supplementary laws suspect and likely to succeed only if it expands federal support of vocational education as a part of the reformation.

The congressional attitude is likely to be that vocational education can be improved by removal of some federal restrictions and broadening of its scope; whatever is done must be something of which the Democratic chairmen and the Democratic Congress can be proud. There is no reason the Administration cannot cooperate fully and share in the acclaim.

Another probability is that the recommendations on education by the Commission on Intergovernmental Relations, due to reach Congress by March 1, 1955, will be considered less seriously than the same recommendations would have been considered by the 83d Congress.

Integration in Washington

▸ With the whole world looking on, the nation's capital city is proceeding with a program of integrating its white and Negro pupils within a year. Three out of five children in the public schools are Negroes, a larger proportion than in any southern state or any large city with a population of more than 500,000. Many schools still serve either white or Negro pupils almost exclusively, thus reflecting the neighborhoods in which they are located. Other schools are inevitably "mixed" in varying proportions, because a single set of attendance districts replaced separate white and Negro attendance areas this year. The residential pattern of the races, in spite of much overlapping, probably results in less actual integration in local attendance units in Washington than there would be in many southern states under a similar program.

The flight of white residents to the suburbs and the occupation of the older sections of Washington by Negroes are typical of population movements in a number of large cities. But the impact is different in Washington than it is anywhere else. For one thing, Washington citizens have no vote. Committees of the Congress serve as the city council. Members of these committees often express themselves in regard to the schools of Washington and on other issues of local government in ways that they believe will prove popular in their home districts. For years it was almost impossible to persuade Congress to authorize daylight saving time in Washington, for instance, simply because influential congressmen came from states where dairy farmers didn't like it.

On election eve in November, Republicans and Democrats joined in a torchlight parade down Pennsylvania Avenue, calling for voting rights for Washington residents. The newspapers campaign unceasingly for the franchise. The idea of a population of 900,000 without the right to vote and to exercise home rule is on its face indefensible. Yet the voteless condition of Washington may persist for a long time, if for no other reason than that many members of Congress from other sections of the country may join with their colleagues from the South in refusing to establish a situation in which the local government of the

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New TETROX sets a *new* high for gentleness to hands. You'll marvel at the fragrant softness of new TETROX—as mild as the average toilet soap.

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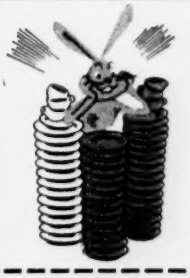

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nation's capital may be controlled by a voting majority of Negroes.

Can't be hurried

▶ Harry S. Ashmore, editor of the *Arkansas Gazette* and author of "The Negro in the Schools," recently discussed implementation of the Supreme Court decision at a meeting of the Washington Women's Press Club. His criterion is one the Supreme Court will doubtless consider in the hearings beginning December 6—that integration should proceed slowly enough to preserve a reasonably effective system of public education everywhere. In 40 per cent of the counties of the South Negroes constitute less than 10 per cent of the population. Mr. Ashmore believes there may be considerable integration soon in many of these areas. Where the Negro population is larger and is evenly distributed geographically, however, the process will create more serious problems in the schools and communities.

In motion

▶ Clint Pace of Dallas, Tex., who will serve as director of the White House Conference on Education to be held in Washington in November 1955, has begun preparation of a series of informational bulletins. These will be supplied to the states for use in the state conferences to be held prior to the White House Conference. He conferred with U.S. Commissioner Samuel M. Brownell and the board of directors of the National Council of Chief State School Officers in Washington October 22 in connection with these plans. Several states will hold their own conferences well before the end of 1954, however, without waiting for information or coordination from the federal level.

Mr. Pace had served as the director of the southwest regional office for the National Citizens Committee for the Public Schools since 1951. His offices are now located in the Department of Health, Education and Welfare.

Mr. Pace's first meeting with his policy board, the White House Conference committee, will be held on December 2.

Mrs. Hobby opposes aid

▶ Secretary Oveta Culp Hobby has repeatedly opposed federal assistance for construction of schools and has said it is not on her legislative agenda for 1955. Citizens and educators who believe the federal government has a responsibility to assist the states in meeting the school facilities crisis personally admire the petite and charming Secretary, but they are certain the supposed reasons she gives for her position will not survive objective examination.

In a recent press conference she defended federal aid for other types of construction but not for schools, on the ground that school districts have special tax advantages. She overlooked the fact that municipal and county governments have the right to construct other public facilities and that the property tax bases are as broad as those for schools. Local communities are in a better position to construct public facilities other than schools in many areas because school bonds often must be approved by school boards *and* the municipal or county authorities before they can be voted upon by the people. Even where education is fiscally independent, it has no local tax base advantage over the authorities of general government.

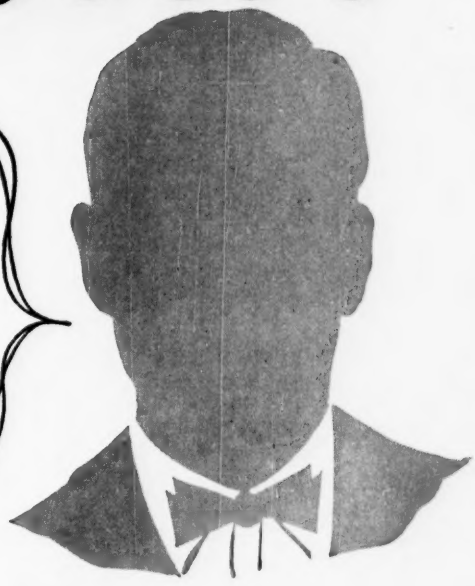
Mrs. Hobby insists that a formula must be found for school construction

"it's the best!"

SAYS

Prominent College Coach

This coach's emphatic statement, "It's the best!" came in response to our question: Why is Maple your choice for a playing floor? *ALL* Coaches queried answered, "Maple," for any basketball floor.



Shin-splints or other types of leg troubles very rare, with gymnasium floors of—

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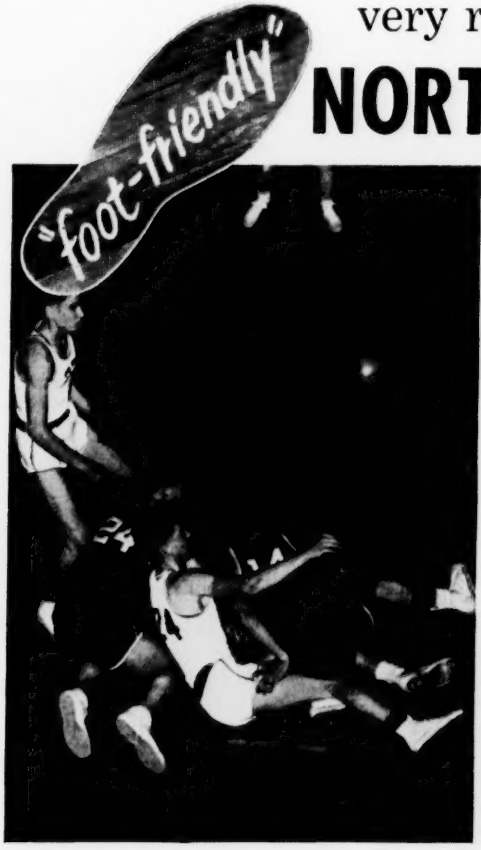

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The plain words above accurately sum up the answers of 200 basketball coaches. (We asked their opinion about Maple flooring in gymnasium and multi-purpose rooms.)

We believe every schoolman and school architect will agree that this is as valid a judgment as could well be obtained. Good coaches have every reason for wanting players' injuries kept at a minimum while confidence and skill are given every chance to develop. They prefer Maple for scores of reasons, such as:

Maple has "give" plus firmness—no "dead" spots—easier on feet and legs—better light reflection—aids peripheral vision by better contrast of court lines, uniformity, less confusion—affords better traction—is smoother, generally more sanitary and less productive of floor-burns.

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that will establish proven need for schools and lack of local fiscal ability to build them before federal assistance will be allowed. No such requirement was suggested by Mrs. Hobby for any of the more favored fields in her department. The fact is that there is more evidence concerning local inability to construct needed schools than has been marshalled in any other field.

Secretary Hobby says proponents of federal assistance for school construction have an "all or none" philosophy. This is true only in the limited sense that proponents do rightly contend that any formula on federal assistance for school construction should apply to *all* of the 48 states just as the federal grant-in-aid formulas do now in other fields.

Mrs. Hobby has refused to support school construction assistance legislation with authorization for very small appropriations or even on a "stand-by" basis. For instance, in the last Congress, the Department of Health, Education and Welfare opposed an appropriation of $55,000,000 for school construction in defense areas under P. L. 815 until after it had been approved by the House of Representatives. It opposed funds for vocational education that were also voted by the Congress. In her press conference, Secretary Hobby said she was aware of the great political effect of recent increases in federal grants for social security, hospitals, vocational rehabilitation, and so forth, even though she believed these aids should not be made on a political basis. The educational stalemate in the department has not become so widely known as the liberally increased aids in other fields have.

Construction bill ready

▸ A bipartisan bill for school construction assistance has been drafted at the request of the House subcommittee which held hearings in October, and will have an excellent chance of enactment whenever it can be brought to a vote in Congress. It is believed this legislation will preserve state and local control of school construction, ensure the use of federal funds where school facilities are most needed, stimulate construction in districts where schools would not otherwise be built, without impeding state and locally financed construction in other districts, and provide complete accountability for federal funds by the states. The consensus is that the President would not veto legislation of this kind, particularly if opinions from the state conferences on education under P.L. 530 indicate widespread public approval of it.

Council on record

▸ State officials are well aware of the competition for local, state and federal funds and the necessity of equitable treatment of such necessary construction as highways, schools and hospitals. A recent report of the Council of State Governments emphasizes that need for funds to build highways is urgent, but goes on to say:

"The highway problem would be difficult enough even if other needs were not so pressing. The commissioner of education estimated recently that we have a deficit of about 370,000 elementary and secondary school classrooms as of September 1954. He estimated further that to erase the deficit, keep pace with increasing enrollment, and replace obsolescent facilities we would need to build 720,000 classrooms in the next five years. At a 1953 construction cost of $33,000 per classroom, this would call for capital investment exceeding $24 billion.

"The number of acceptable hospital beds . . . was approximately 56 per cent of estimated needs as of Jan. 1, 1953. To meet the backlog of need, replace facilities as they become inadequate, and build facilities to take care of the anticipated population increase would require construction of hospitals with a capacity of 1.25 million beds by 1966. At current cost estimates of $16,000 per bed, capital investment, much of it from government sources, would total $20 billion.

"These are but two of the governmental functions whose unmet needs clamor for attention and an appropriate share of the governmental purse. The problem . . . for the next 10 or 20 years is to find the resources necessary to meet these several needs."

The federal government has voted $885,000,000 per year for highways, thus sharing $1,700,000,000 with the states on a 50-50 basis for the part of the highway system that is federally aided. The federal hospital aid program is smaller but substantial; school needs have thus far been ignored except in federal defense areas.

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NEWS IN REVIEW

Action on Desegregation at Milford Deferred

MILFORD, DEL.—Court action paving the way for the readmission of the 10 Negro children to the high school here has been delayed until after the state supreme court hearings on the segregation issue December 13. A case, pending at the court of chancery of Delaware, has been filed by the National Association for the Advancement of Colored People on behalf of the children and their parents.

Effects of the Milford incident were summed up by Milton Bracker in a recent report to the *New York Times*. The case, he said, underlines the fact that tremendous problems lie ahead when the Supreme Court decrees come to be implemented in the Deep South. Second, it shows clearly that the psychology of the Ku Klux Klan, of slurs on other races and religions, can readily be activated by a combination of local conditions and outside influence. Third, it shows to an astonishing degree the amount of ignorance that prevails about the nature of our government and the rôle of the Supreme Court.

In a separate hearing in the chancery court recently, action has been initiated to deprive the National Association for the Advancement of White People of its charter. H. Albert Young, Delaware attorney general, stated that the group had acted in direct contradiction to its own principles, as stated in its charter, "to foster, protect and maintain all rights of citizens as guaranteed by the Constitution of the United States of America."

Georgia, Louisiana Vote to Preserve Segregation

ATLANTA, GA. — Georgia voters have adopted a constitutional amendment giving the state legislature authority to finance private schools as a means of preserving racially segregated classrooms throughout the state. The action, passed by a small margin, received largest support in rural areas. The state superintendent of public instruction, M. D. Collins, opposed the measure.

The amendment, which was sponsored by Gov. Herman Talmadge, would permit the state legislature to make grants of state school money to individuals. In trying to avoid compliance with the Supreme Court decree, the amendment would also put public school facilities under private operation in areas where segregation was challenged.

Governor Talmadge said the results of the voting "should put the Supreme Court and the people of this nation on notice that the people of Georgia are determined to preserve segregation." He added that he hoped "it will never be necessary" to use the measure.

The people of Louisiana have also taken steps to preserve segregation by approving an amendment to make the continuance of segregation a police responsibility based on the apparent assumption that integration measures are to be regarded as a menace to public safety. With approval of another measure requiring higher literacy and mental standards for voting in public elections, the Louisiana legislature hopes to discourage Negro voting.

Nominees for President-Elect Announced by A.A.S.A.

WASHINGTON, D.C.—The 1956 president of the A.A.S.A. will be one of these three superintendents: Philip J. Hickey, St. Louis; Paul J. Misner, Glencoe, Ill., and C. C. Trillingham, Los Angeles County, California.

The following superintendents were nominated for the post of vice president: Omer Carmichael, Louisville, Ky., O. H. English, Abington, Pa., and Ward I. Miller, Wilmington, Del. Nominated for the four-year term as member of the executive committee were Supts. Martin W. Essex, Lakewood, Ohio; Henry T. Hollingsworth, Bloomfield, N.J., and Leonard L. Maine, Portsmouth, R.I.

Philip J. Hickey carries the title of superintendent of instruction in the school administration organization in St. Louis. He has held this position since 1944.

Paul J. Misner has been superintendent at Glencoe for 19 years. He was chairman of the 1950 A.A.S.A. yearbook, "Public Relations for America's Schools." With Alice Miel and G. Robert Koopman, he co-authored the book "Democracy in School Administration."

It was 1942 when C. C. Trillingham became superintendent of the schools of Los Angeles County. Earlier he had been superintendent at Scott City and St. John in Kansas. He was a member of the 1952 yearbook commission.

Final ballots will be mailed December 1. The man elected by the 9040 members of A.A.S.A. will become president-elect on March 15, 1955.


Philip J. Hickey


Paul J. Misner


C. C. Trillingham

Alabama Gets Plan for Separate Schools

MONTGOMERY, ALA. — An interim committee of the state legislature has proposed a plan that, in effect, would maintain the state's present mandatory system of separate schools for white and Negro children.

A majority of the members of the state legislature had favored calling a special session to take up the committee's proposals, but Gov. Gordon Persons refused to issue a call for the special session. Governor Persons stated that compulsory integration was unthinkable but he felt that a special session would lead to the abolition of the public school system, a measure he strongly opposed.

The plan set forth by the committee provided for amendments to several sections of the state constitution so that the state could discontinue public schools wherever necessary in order

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to avoid "friction and disorder." The state and its subdivisions would be empowered to devote public money to the aid of private education where public facilities were inadequate or where public operation involved the adoption of "coerced policies." If, for any reason, an "acceptable or working solution" could not be effected, then public schools could be discontinued and the children in the locality given individual public assistance. The committee did not propose to abolish public education, but rather suggested the possibility that public schools might be discontinued if their operation should pose a threat to the maintenance of good will, peace and order.

Integrated schooling, the committee stated, might be allowed in localities where students could meet entrance standards for the integrated school and where this situation was acceptable to the community. Compulsory attendance at a mixed school, it was felt, would inevitably result in disorder and friction.

"The main objective of the proposals," the committee's report concluded, "is to give the authority to the legislature to assure the recognition by our school authorities of the right of white people as well as Negro people to elect to attend schools of their own race."

Southern Students Invited to See Race Harmony

NEW ROCHELLE, N.Y.—An invitation to see integration at work was sent by the high school here to students in five southern high schools where there had been difficulties in establishing combined schools. Students and principal at New Rochelle asked the southern young people to spend a week with them to see how integration functions in a system where it has been in effect for a long time.

Ten students, four from Southern High School in Baltimore and two each from McKinley, Anacostia and Eastern high schools in Washington, D.C., accepted the invitation. Students from Milford, Del., were also invited, but the principal there refused the invitation on the grounds that the problems concerning integration in that community lay with parents and other lay persons rather than with the students.

Visitors were most interested in personal and social questions. "I didn't come here to get my picture in the paper," said one girl. "I came here to find out if white girls dance with Negro boys at a high school prom in an integrated school." One of the boys wanted to "see how the football team works with both white and colored boys on it."

Another girl wondered about teachers: "If we had a Negro teacher in our school, would she be likely to mark the white students fairly, and would we work as well for her as we would for a white teacher?" After a biology class taught by a Negro teacher, she decided, Yes. "As a matter of fact, she's a much better teacher than my own biology teacher at home."

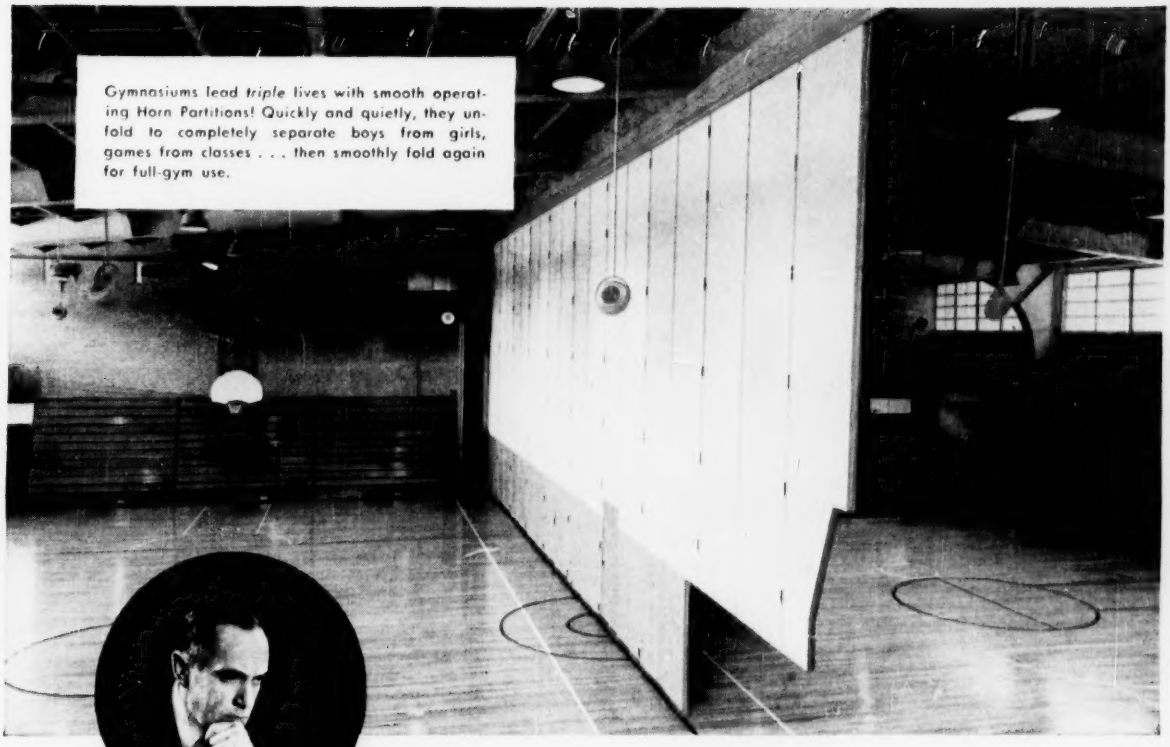
About integration Jack Lindon of Washington said, "We just feel that this thing shouldn't be rushed into—maybe it should be started with the primary grades instead of the high school, and anyway our colored maid at home says that her children are quite happy to be equal and separate."

For Allan Gross, Washington student, the experience brought greater respect for both races: "The thing that impressed me most was that any student, Negro or white, would stand up at any time and speak his mind without fear of discrimination or violence."

Adult Education Now Reaches 1 of 4 Americans

CHICAGO.—"Our audience," said leaders in the field of adult education, "now includes one out of every four U.S. citizens." This uniquely American scheme of things—continuing education beyond a youthful terminal point—was one of the major points noted by the delegates to the Adult Education Association convention held here November 5 to 10.

The theme was "Adult Education in a Free Society," and the keynote address was given by Henry Steele Commager, professor of history at Columbia University. An atmosphere in which education and learning can flourish is the moral challenge of our day, said Dr. Commager. "It is not enough that we provide our children, and our adults too, with splendid buildings, with numerous and well paid teachers, with the most up-to-date apparatus . . . we



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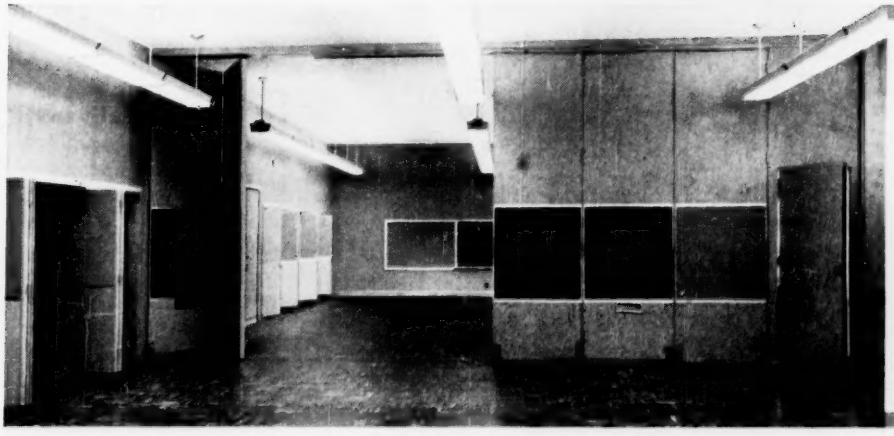

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NEWS

must cease harassing our teachers, exposing them to suspicion."

Tackling the issue of intellectual freedom as it exists for both adult and youth, Dr. Commager said: "It is unbecoming for a people who have made a religion of education, whose whole political system rests on the assumption of an enlightened electorate . . . that we [have adopted] the easy and shabby pose of anti-intellectualism." He went on to point out that today we are witnessing the deepest, most widespread intolerance the nation has known since ante-bellum days in the South. "It is a persuasive, terrifying thing. It reveals not only intolerance itself but a frightening vanity, a profound and terrifying conceit, for the logic behind it is a logic of absolutism, and we are witnessing today a revival of absolutism in many realms."

Three different organizations met officially during the six days set aside for the adult conferences in Chicago. The National Association of Public School Adult Educators and the council of national organizations of the Adult Education Association met prior to the official conference of the A.E.A. itself. At the meeting of public school adult educators, Edgar Fuller, executive secretary of the National Council of Chief State School Officers, speaking at the closing banquet, expressed the conviction that, unless state departments of education and local boards of education make adult education a central part of their educational programs, there will be little opportunity to develop community schools serving continuously the needs of all citizens.

Earlier in the conference, Shelby M. Jackson, superintendent of public instruction for Louisiana, reported to the delegates that in the last four years his state's appropriations for adult education have increased 10 times. Only 10 of the states now have substantial state aid for adult education. Superintendent Jackson emphasized that the public school must offer a total educational program for children, youth and adults.

At a specially planned program the conference delegates were introduced to "The Story of Eldorado." Eldorado is the small downstate Illinois community where spectacular "face lifting" took place through the voluntary efforts of many citizens to improve their community. The story was televised nationally on the October 13 program of "See It Now."

NEWS

American Council on Education Contemplates How to Make Room for Wave of Students

CHICAGO.—"The Impending Tide" was the theme for the American Council on Education's 37th annual meeting here just four days after the great Chicago flood. But it was enrollment, not water, that concerned the delegates.

Statistics on the size of the enrollment increase soon to be faced by colleges over the country were given by Harvey M. Rice, president, Buffalo College for Teachers, Buffalo, N.Y. Our total college enrollment this year, he said, is 2,300,000, about 150,000 under the all-time peak in 1949. It appears now, he reported, that in 1955 the 1949 peak will be at least reached and possibly passed.

Next year will be just the beginning of a rapid upturn in enrollments, with 3,000,000 predicted for 1960 and 3,660,000 (a 56 per cent increase over the current year) foreseen for 1965. A look at the problems this will create was given by J. F. Wellemeyer Jr., adviser on personnel studies of the American Council of Learned Societies, who predicted, "From 1954 to 1960 it will be necessary to employ an average of 8000 additional college teachers per year and from 1960 to 1970 it will be necessary to employ an additional 16,000 per year."

The council was well stocked with monographs presenting statistics on the tidal wave. One, published by the American Council itself, was titled "A Call for Action." Also presented to the council delegates was the pamphlet sponsored by the National Association of Manufacturers entitled "Our Colleges and Universities and Their Financial Support" and "The Impending Tidal Wave of Students," a study by the American Association of College Registrars and Admissions Officers.

It was obvious from the attention given the booklets as well as from the general sessions and panel groups at the October 14 and 15 conference that colleges are determined to be as ready as possible for the days that are to come. Avoiding the last minute rush of construction such as has been necessary in elementary schools lately is a goal of the colleges at the present time.

Closely akin to the topic of increased enrollments was the discussion on how big a college or university should be and what should be planned for in the way of added facilities. Logan Wilson, president of the University of Texas, seemed to favor a limit of about 20,000 students. He agreed, however, with Russell D. Cole, president of Cornell College, Mount Vernon, Iowa, that it is difficult to set an absolute number of students as an optimum size. Essential components to be kept in mind in approaching the problem, said President Cole, are "the educational program the institution wishes to carry on, and the conditions and setting in which it is to be operated."

What about expanding existing facilities? There was advice on this from Richard H. Sullivan of the Educational Testing Service, Princeton, N.J., who said, "We do not now have a very sound notion, based on adequate research, of the numbers of students that our 'existing facilities' . . . will take care of in the new situation ahead. I will quickly grant that more dormitories are needed, more laboratories, more classrooms, more offices—but in what institutions, in which areas, under what orderly set of systematic assumptions, and with what degree of utilization daily and weekly? Until each institution, whether now crowded in obsolete quarters or praying for more students to fill up the place, can make its own estimates of this nature in concrete and specific terms, we are going to be still using candles in an underground cavern, not searchlights on a well paved road."

The council was opened with a discussion on educational goals, content and practices—"What developments should we anticipate as we plan for expanding higher education?" This question was approached from three points of view: the natural sciences, the social sciences, and the humanities. Not much consensus had been formed by the final session of the council, but at least the issues were more clearly drawn by the time Gordon K. Chalmers, president of Kenyon College, Gambier, Ohio, gave his interpretive summary at the closing luncheon.

Contemplating as they did the future of college education in the Sixties, the delegates remembered the advice of their president, Arthur S. Adams, at the annual dinner: "There are no magical cookies which one can eat and thereby quickly perceive the solution [to our problems]. Useful answers,

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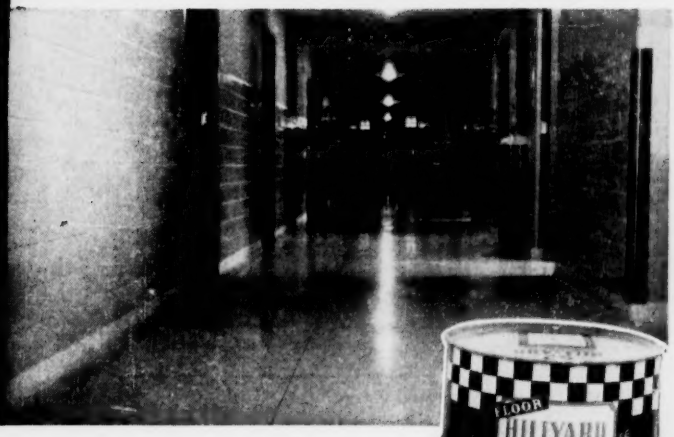

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NEWS

right answers, will come only from thoughtful deliberation, precise analysis, adherence to sound principles, and enduring courage to take the next step. If the picture is grim . . . it is blotted out by the enormous challenge it presents and the truly inspiring opportunity it offers."

St. Louis Schools Waste $1,500,000 Yearly, Report Says

ST. LOUIS.—A management survey team has reported that noninstructional costs in the school system here are about $1,500,000 a year too high. The report was released in mid-October.

The survey was conducted by a management consultant team from Chicago. The team pointed out that the figure which could be saved was about 16 per cent of this year's total noninstructional budget.

Typical of some of the findings reported to the board were these: School desks have been refinished in the shop division at an average cost of $14.53 a desk. New desks can be bought, said the report, for about $10.50, while desk tops alone can be replaced for $4.50.

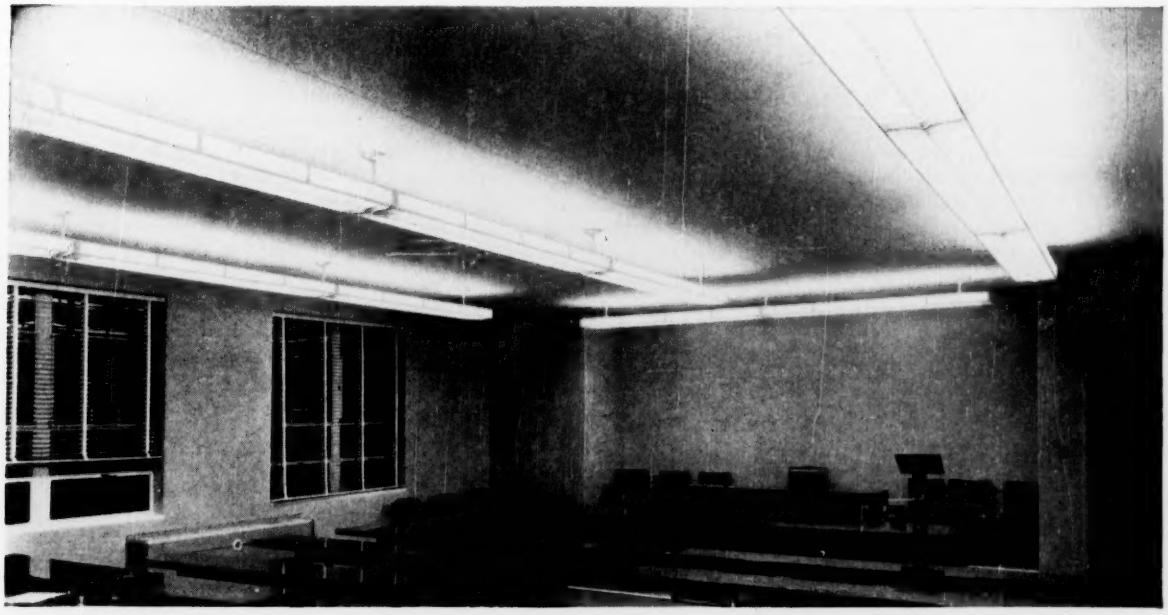
Cost of using the board's own architectural departments has averaged about 9 per cent of total cost of school construction projects, the report pointed out. Fees for private architectural work in this area range from 4 to 6 per cent.

The report called attention to the chauffeur-driven automobiles maintained for administrative officers. Three cars have been used to transport individual officers to and from their homes.

The St. Louis school board and school officials have announced that written definitive reports on certain aspects of the survey will be submitted soon. Some of the recommendations made by the consultant firm were: administrative reorganization of the board, elimination of duplicating services, better planning, an improved and centralized system of auditing and accounting, and contracting for many of the maintenance and operating functions of the school system.

The report recommended unit control in contrast to the present situation of four statutory officers of the board. The report also recommended that the board operate as a committee of the whole rather than through the use of special standing committees.

PLEXOLINE-2* IN LAW SCHOOL'S MOOT COURTROOM. Suspended on 8" hangers, three rows of two lamp Day-Brite PLEXOLINE Slimline fixtures provide a high level of comfortable illumination. A supplementary row of PLEXOLINES keeps the front of the room well lighted.



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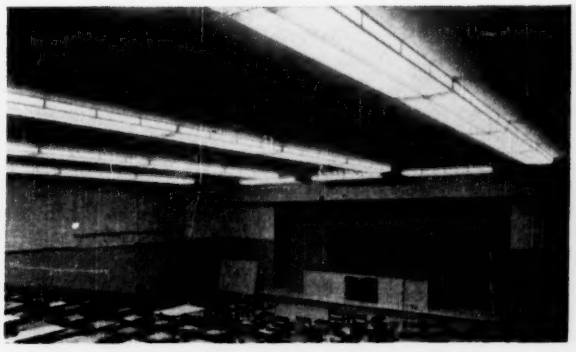

PLEXOLINE-4* IN LECTURE ROOM. In this large space with high ceiling, powerful four lamp PLEXOLINES are used to guarantee uniform distribution of light.

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READER OPINION

(*Continued From Page* 10)

time tower very high before me, with every tissue of them imbued with the warmth of heart of those people who afforded them to me.

I think I hear your voices, whispering, laughing and smiling, just as I did when I saw you.

With warmest regards and thousand thanks to you and your family, and looking forward to hearing from you some time, humbly yours.—JINTARO KATAOKA, *cultural official, International Cultural Relations Section of the Ministry of Education, Tokyo, Japan.*

New Attempts to Cut Vocational Funds

Sirs:

Last spring (April 1954, *p.* 140) I wrote regarding the recommendations of the director of the budget to cut federal funds for agricultural education in the public schools and to increase the funds for agricultural extension, which is conducted outside the schools. Fortunately, Congress saw the situation differently and comparable increases were given for both programs.

Some are still battling for the elimination of federal funds for vocational education. The latest to enter the lists is the committee on social legislation of the Chamber of Commerce of the United States. In a 36 page printed report, issued by the national chamber, it is held that "vocational education grants should be considered temporary in nature" and "the states should have full responsibility for these functions." The report pays high tribute to vocational education and argues that the states are so completely sold on it that they will gladly contribute the $26 million currently coming from the federal government.

The report contends that federal appropriations for vocational education are insignificant and hence should be replaced by state appropriations. It also labels the federal appropriations to the land-grant colleges "insignificant," but says it would be satisfactory to continue them because they are insignificant.

Almost everyone advocating the elimination of federal funds for vocational education claims to be wildly enthusiastic about vocational education and is sure that everyone else is equally enthusiastic.

The fact is that vocational education in the public schools has become what it is through a system of local-state-federal cooperation. To eliminate one of the cooperating partners could possibly ruin the entire structure that has been built in the last 37 years. This pattern of local-state-federal cooperation in public education should be adapted and improved for extension to all public education, instead of being eliminated in the field of vocational education.

Every reduction in federal funds of any kind makes heavier the burden of the states and communities in financing the public schools. Schoolmen in every field should stand with the vocational educators in fighting the opposition to federal aid to vocational education. The opposition is against all federal aid to education. If we lose the aid we have, the effort to obtain federal funds for any purpose will be made more difficult.—H. M. HAMLIN, *chairman, division of agricultural education, University of Illinois.*

Newport Catholic High School, Newport, Ky. *Architects:* Betz & Bankemper, Covington. *Contractor:* John M. Hemmer Construction Co., Covington. *Owner:* Bishop William T. Mulloy, Diocese of Covington.

Covington Catholic High School, Dixie Highway, Covington. *Architects:* Betz & Bankemper, Covington. *Contractor:* H. W. Miller Construction Co., Inc., Covington. *Owner:* Bishop William T. Mulloy, Diocese of Covington.

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NEWS

Explosion Wrecks Oklahoma High School; 45 Hurt

ALLEN, OKLA.—An explosion in the high school here wrecked the building and sent children hurtling into the ceiling and through a brick wall. One of the school officials reported that he was searching for a leak around a gas stove with a lighted match when, presumably, gas which had formed in the basement beneath the classroom in which he was looking ignited to cause the explosion.

At the time the explosion occurred there were 125 students in the building; about 45 were injured seriously enough to require medical care. Students were thrown up to the fiberboard ceiling, and in some cases through it, by the force of the blast.

All but one of the eight classrooms of the school were severely damaged, and windows were broken in all rooms. However, there was no fire. Damage was estimated at $80,000.

Big Need Is Research in Safety Education

CHICAGO.—Research, research, more research. This, the officers and members of the school and college section of the National Safety Congress admit is their No. 1 challenge.

The school and college section at the 42d Annual Congress held here October 18 to 22 heard a detailed report of a recent survey of safety education, activities and needs. The survey was presented by Leslie R. Silvernale, coordinator of driver education, Michigan State College, and Wayne P. Hughes, director of the school and college division of the National Safety Council. An evaluation of the survey was given by Lowell B. Fisher of the University of Illinois, vice president for schools and colleges of the National Safety Council.

The opening lines of the survey report summarized the word received from 155 safety education supervisors:

"If a national organization wants to help improve school safety education, it can do so best by undertaking or sponsoring research. The research can be of any type and it can be related to any area of safety or safety education, at any school level, or related to any aspect of administration.

"The above is the outstanding fact shown by a study of school needs as expressed by the school people them-

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selves. Thirty-one types of materials and services were defined. Four hundred school people with primary interest in safety were asked to determine where there are unfulfilled needs for each service or material in 26 areas of safety and safety education (driver education, fire safety, physical education, and so forth); 10 educational levels (elementary, junior high, teacher education, and so forth); and six areas of administration (instruction, school liability, and so forth)."

Not everyone was in complete agreement as to just what the safety supervisors had in mind when they talked of "research." But it probably meant that they wanted to know how effective certain instructional devices have been in actually changing attitudes and bringing about safe behavior, particularly on the part of school age boys and girls.

The school and college division introduced an innovation in its conference procedure this year: Two nights were set aside for consultation sessions with competent people in various fields of safety education. Visualized in advance as primarily a personal consultative situation, it seemed to develop on some occasions into a group discussion, but the approval of the participants in either case was gratifying, conference planners said. Continuation of this conference procedure is anticipated for next year.

As is typical with conferences, more questions were raised than were answered, but the "special interest groups" set up as the core of the conference were valuable as a forum of opinion on the many issues. Questions that seem to pop up from year to year are these:

Does a school safety patrol teach children to be overdependent? How do we balance protection and education in our safety program? What rules and regulations should be adopted to govern loading and unloading of school buses? What teaching technics are best for influencing the habits and practices of children? What does environment have to do with safe living?

These and many other questions will still be around in October 1955 when the 43d Congress meets. In the meantime, experimenting in safety education goes on with renewed vigor in research as demanded by the survey.

ABOUT PEOPLE

APPOINTED . .

R. M. Eyman

R. M. Eyman, assistant director of education for the state of Ohio, to state superintendency of public instruction, succeeding **Clyde Hissong,** now a professor of education at Bowling Green State University, Bowling Green, Ohio. Mr. Eyman served as superintendent at Rushville and Pleasantville and for Fairfield County, Ohio, before joining the state department of education.

Richard R. Robinson, assistant superintendent at Trenton, N.J., to superintendency there, succeeding **Paul Loser,** effective February 1.

James B. Morrison to superintendency of Union 29, Mechanic Falls, Me., succeeding **Frank Drisko,** who has retired.

Millard Z. Pond

Millard Z. Pond, project coordinator, School-Community Development Study, C.P.E.A., Ohio State University, to superintendency at Burlington, Iowa. He succeeds the late **R. H. Bracewell.**

Harold J. Rankin, supervising principal of the Mohawk Central School District, Mohawk, N.Y., to superintendency at Medina, N.Y.

Leon O. Smith to superintendency for Douglas County Schools, Omaha, Neb. Mr. Smith recently retired as assistant superintendent at Omaha, after 36 years.

Forrest Rozzell, director of field services of the Arkansas Education Association, to executive secretary of the association, succeeding **Hoyte R. Pyle,** who has joined the teacher retirement system of Arkansas.

David H. Patton, superintendent at Syracuse, N.Y., to educational consultant with the department of school services and publications, Wesleyan University, Middletown, Conn.

Doyle W. Ayers to superintendency at Casar, N.C., succeeding **J. E. Bluff,** who has resigned.

DIED . . .

Leslie Carter, former superintendent at Riceville, Iowa.

Armand J. Gerson, former associate superintendent at Philadelphia.

Omar H. Bennett, former superintendent for Hamilton County, Ohio.

Charles Garrett, former superintendent at Shenandoah and Fairfield, Iowa.

Ray Short, former superintendent for Grayson County, Sherman, Tex.

John C. McGlade, former deputy superintendent in charge of secondary education, San Francisco.

A. H. Brauer, superintendent at Hubbard, Iowa, for the last six years.

Carl Lawrence, 83, president emeritus of Northern State Teachers College, Aberdeen, S.D.

Orville C. Pratt, former superintendent at Spokane, Wash.

COMING EVENTS

NOVEMBER

29-Dec. 2. National School Service Institute, Chicago.

DECEMBER

27-29. National Council of Teachers of Mathematics, St. Louis.

FEBRUARY

19-23. National Association of Secondary-School Principals, Atlantic City, N.J.

24-26. American Association of Colleges for Teacher Education, Chicago.

24-26. National School Boards Association, St. Louis.

26-March 2. Regional convention, American Association of School Administrators, St. Louis.

27. National School Public Relations Association, regional conference, St. Louis.

28-March 2. American Educational Research Association, regional meeting, St. Louis.

MARCH

6-10. Association for Supervision and Curriculum Development, Chicago.

12-16. Regional convention, American Association of School Administrators, Denver.

13. National School Public Relations Association, regional conference, Denver.

14. American Educational Research Association, regional meeting, Denver.

16-19. Department of Elementary School Principals, N.E.A., Chicago.

31-April 2. Southeastern Association of School Business Officials, Birmingham, Ala.

APRIL

2-6. Regional convention, American Association of School Administrators, Cleveland.

3. National School Public Relations Association, regional conference, Cleveland.

4. American Educational Research Association, regional meeting, Cleveland.

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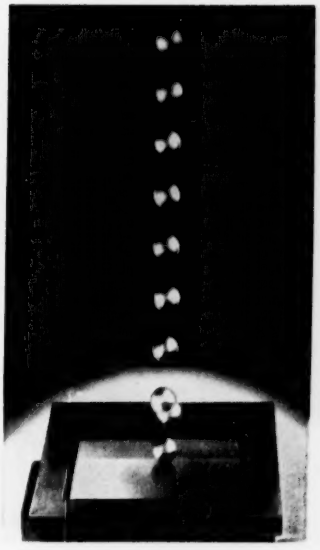

LOOK AT THIS TEST! This shows a half-pound (1-$\frac{3}{8}$" diam.) steel ball being dropped on a piece of $\frac{1}{4}$"-thick *Tuf-flex* from a height of ten feet and bouncing off without damaging the glass. If maximum impact resistance *is* reached, *Tuf-flex* disintegrates into small, relatively harmless pieces.

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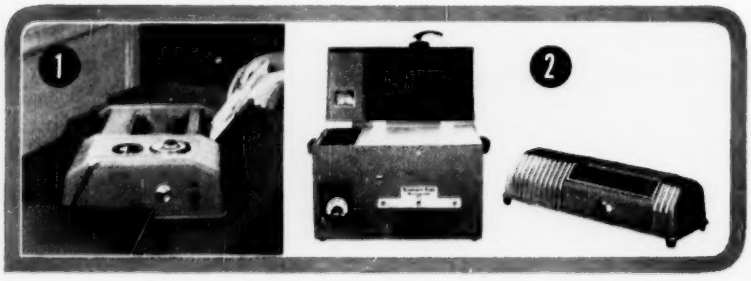

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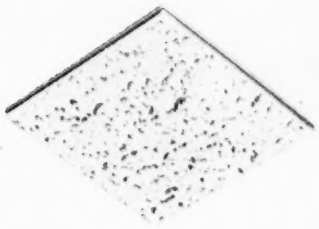
Profit-Building **IDEAS** For Business

What's New FOR SCHOOLS

DECEMBER 1954 Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 148. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Acoustical Tile of Fissured Woodfiber



Forestone Fissured Woodfiber Acoustical Tile combines beauty with economical cost. It is made of fissured woodfiber with the appearance of travertine. The irregular, random fissures provide beauty with effective acoustical treatment. It has a square edge, resulting in a ceiling installation with a uniform, textured tone. It is also made with a beveled edge for installations where a definite tile pattern is desired.

The soft, warm tone of Forestone Tile provides a light-reflective surface which has a flame resistant finish. The finish is washable and smudges or ordinary dirt may be removed with a damp cloth or sponge. No special finish is required on Forestone but it may be repainted without appreciable loss of efficiency. Forestone is manufactured in 12 by 12 inch units, ¾ inch thick. **Simpson Logging Company, 1010 White Bldg., Seattle, Wash.**

For more details circle #256 on mailing card.

Floor Finish Is Wax-Free

A water based dispersion of resins, including synthetic co-polymer resins, is offered for protection and beautification of asphalt tile, linoleum, rubber, vinyl and sealed wood floors. Known as Stride, the product contains no wax, petroleum or other organic solvents, although it is designed for the same uses as water emulsion waxes. It is harmless to all types of flooring, requires no buffing and can be readily removed by Vestal De-Waxer after excessive buildup. Stride develops complete water resistance in three to four days and can be patched in worn spots or traffic lanes without showing lap marks. **Vestal, Inc., 4963 Manchester Ave., St. Louis 10, Mo.**

For more details circle #257 on mailing card.

Versatile Fixture for Indirect or Direct Downlight

A new approach to cove lighting is offered in the "2-in-1" Grate Lite Cove and Bracket Fixture. It is designed for use as a cove indirect or a direct downlight and mounts either way without extra hardware or any change in the fixture. High efficiency is achieved as the fixture beams 80 per cent of the light directly upward and outward, the balance of light being beamed down to brighten side walls. When used as a downlight the distribution is reversed.

The Guth louver-diffuser provides shielding in the 45 by 90 degree zones. The movement of air through the open cubes helps to keep the fixture clean and it is easily cleaned when necessary. **The Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.**

For more details circle #258 on mailing card.

Educational Kits Teach by Doing

A series of educational kits has been developed for elementary school science teaching. Called "American Industry" Educational Hobby Kits, each unit covers one subject, with material permitting the pupil to make or use equipment which helps him to learn the basic facts in that field. Each kit is prepared by a leading industrial firm in collaboration with the Museum of Science and Industry in Chicago, and includes a well-illustrated book written by leading scientists and educators in each field, prepared under the direction of Encyclopaedia Britannica.

The Weather Kit illustrated was developed by Taylor Instrument Companies. It permits pupils to forecast weather conditions with instruments they build themselves. Dials, gauges and scales required for all of the instruments are cut from a sheet of anodized aluminum with ordinary scissors. A compass is assembled, cloud formations are determined by a cloud chart, and a jointed pole with suspended plumb bob is assembled and used for determining the direction and speed of clouds. Other equipment in the kit teaches use of the hygrometer, thermometer, barometer and other instruments.

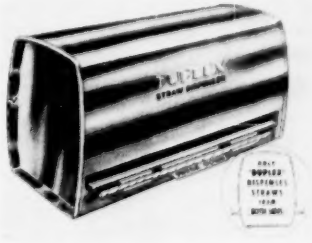
The first five kits in the series cover the fields of electronics, optics, geology, weather and gems. They provide valuable teaching aids in the school or in the home. The program is coordinated by Industrial America, Inc., with kits distributed by **Central Scientific Co., 1700 Irving Park Rd., Chicago 13.**

For more details circle #259 on mailing card.

Straw Dispenser Fulfills Sanitary Requirements

Straws are emptied into the Duplex Straw Dispenser without being handled and are dispensed one at a time from each side of the unit. They are completely covered, even on the ends, in the dispenser. The "magic-touch" dispensing principle eliminates jamming and makes straw dispensing fast, accurate and easy.

The all stainless steel unit is easily cleaned and kept sanitary. It disassembles in seconds and is as quickly re-assembled after cleaning. One model holds a full carton of 6½ inch milk or 8½ inch standard straws. A second model holds 8½ inch jumbo straws. The dispenser has a self base for table or counter use, operates economically, eliminates



wrapper nuisance and is designed to comply with all sanitary requirements. **Duplex Straw Dispenser Co., 511 N. La Cienega Blvd., Los Angeles 48, Calif.**

For more details circle #260 on mailing card.

(Continued on page 122)

What's New . . .

Ten Key Adding Machine in Burroughs Line

The utmost in simplicity in design and operation is offered in the new Burroughs Ten Key Electric Adding Machine. It is the result of more than five years of research and engineering and marks the entry of Burroughs Corporation into the ten key field. The machine is ultra modern in design with a low, durable cast aluminum case finished in two-tone amber gray paint, scientifically blended to eliminate reflected glare. It is designed for touch fingering addition with maximum operating comfort. The span of a hand easily covers not only the adding keys but all electrically operated control keys as well. The machine is 13 by 8¼ by 7 inches in size, has exceptionally quiet operation and features a detachable electric cord and durable transparent plastic tear off blade. **Burroughs Corporation, Detroit 32, Mich.**

For more details circle #261 on mailing card.

Auditorium Seats Give Added Convenience

New with the Griggs Equipment Company is the line of "Push-Back" chairs for auditoriums and theaters. Adapted to any auditorium seating plan, the "Push-Back" chairs permit ingress to or egress from a row of seats without the necessity for others to rise. The seat moves backward with a slight body movement, creating enough aisle space

for movement in and out of the row. Manufacturing and distribution of the seats was purchased from the Krochler Company. **Griggs Equipment Co., Box 630, Belton, Tex.**

For more details circle #262 on mailing card.

Reelband Protects Film and Tape

The Pro-Tex "Vinylband" is a reelband with finger tip fastener designed to keep 16 mm. motion picture film of any length neatly and tightly wound. The edge and sprocket holes of film are protected in shipment due to the rigidity and slightly oversize width of the band. Vinylband is flexible, even at low temperatures, and can be marked with title and reel numbers.

Magnetic tape is protected with the new Pro-Tex reel clip which snaps into place without picking up the reel. It keeps tape or 8 mm. motion picture film wound tightly and smoothly. It is made of non-magnetic metal and has space for reel data and identification. **Pro-Tex Reel Band Company, 241 Film Bldg., Cleveland 14, Ohio.**

For more details circle #263 on mailing card.

Metal Protective System Prevents Rust

The preservation and decoration of iron, steel and non-ferrous metals are achieved with the new Bar-Ox Metal Protective System. Bar-Ox is easy to apply by brush, spray or roller. It dries quickly to a hard, tough, water-impermeable film with a full-gloss effect which holds. The coating is resistant to sun and weather, to moisture and to fumes in the atmosphere. It is available in colors and in black and white. **Truscon Laboratories, Caniff and G.T.R.R., Detroit 11, Mich.**

For more details circle #264 on mailing card.

(Continued on page 126)

After two years of service in the Eastern Air Lines' Miami terminal, the Terraflex floor has proved its durability . . . looks colorfully new . . . and reduced cleaning and maintenance time.

Johns-Manville Terraflex Vinyl Floor Tile provides maximum wear with minimum care in Eastern Air Lines' new passenger terminal

A million or more people use the Miami terminal of Eastern Air Lines each year. To meet the vigorous demands of this heavy traffic, Eastern selected Johns-Manville Terraflex Vinyl Tile flooring.

J-M Terraflex® is a flooring of time-proved superiority. Made of vinyl and asbestos it is exceptionally tough and resistant to traffic . . . defies grease, oil, strong soaps and mild acids.

Terraflex can reduce maintenance costs one half. In actual use, tests showed Terraflex maintenance expense to be approximately 50% less than that of the next most economically maintained resilient flooring. Its nonporous surface requires no hard scrubbing . . . damp mopping keeps it clean and bright . . . frequent waxing is eliminated. Through years of economical service Terraflex pays for itself.

Available in a large range of striking colors, Terraflex is ideal for restaurants, public areas, schools, hospitals.

Specify J-M Terraflex whenever your plans call for resilient flooring. Its long-wearing beauty and long-time economy provide a maximum of reliable floor service. For information write Johns-Manville, Box 158, New York 16, N. Y.

JOHNS MANVILLE PRODUCTS

Johns-Manville

What's New ...

Fluorescent Fixture Lights Chalkboard

Designed for the supplementary lighting of vertical surfaces, the Chalkboarder is a new fluorescent fixture which is easily installed and quickly adapted to meet specific lighting requirements. It provides excellent vertical lighting of chalkboards, bulletin boards and similar areas. The reflector may be rotated for proper shielding and apertures in the top of the reflector permit a soft uplighting to reduce the contrast between the unit and the lighted area below.

The Chalkboarder is finished in gray Neutra-tone with aluminum reflector. The inner reflecting surface is finished in White Supercoat Baked Enamel. **Smithcraft Lighting Division, Chelsea 50, Mass.**

For more details circle #265 on mailing card.

Convector Radiators in Herman Nelson Line

Seamless copper tubes, mechanically expanded into aluminum fins, form the lightweight heating elements in the new line of convector radiators added to the Herman Nelson heating and ventilating products. They are designed especially for economical, responsive heating operation. Tubes are permanently joined to copper headers with a high temperature solder, for maximum heat transfer

The new convector-radiators are available with tappings for two-pipe steam, two-pipe hot water and one-pipe steam heating systems. Heavy gauge steel cabinets with rounded corners are designed for free-standing and semi-recessed installation. The units are offered in four depths, eleven lengths and three heights, to fit every need. **American Air Filter Co., Inc., Louisville 8, Ky.**

For more details circle #266 on mailing card.

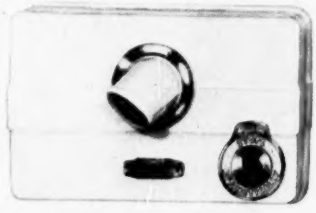
Single Unit Compressor for Airbrush

Oil-free air is delivered under pressures automatically controlled and ranging from one to 60 pounds with the new, single unit airbrush compressor recently introduced. It is designed to meet air pressure requirements of schools and other institutions. The unit is readily portable and can be used in art classes, auditoriums and other areas. **Paasche Airbrush Company, 1909 Diversey Pkwy., Chicago 14.**

For more details circle #267 on mailing card.

Electric Hand Dryer Is Semi-Recessed

Faster drying with an improved heating element are offered in the improved Sani-Dri electric hand dryer for semi-recessed installation. A new circuit-breaker, which shuts off the heating element when a hand is placed on the air intake or nozzle, prevents damage but automatically makes contact when the hand is removed. The improved starting switch is easy to operate and provides instant starting. The new simplified timing device shuts the machine off automatically. **The Chicago Hardware Foundry Co., North Chicago, Ill.**



For more details circle #268 on mailing card.

(Continued on page 130)

A Touch so light... it's a delight to teach on ... a new kind of electric typewriter

You and how you teach helped determine the design of the new Royal Electric.

It was engineered with you and your pupils in mind. Here are its five chief advantages:

Speed-flo Keyboard. The pupil discovers that the touch is smoother and more responsive than that found on any electric typewriter yet designed. It is faster yet completely under the typist's control.

Quiet Carriage Return Mechanism. Royal's new Quiet Return Mechanism is the quietest, smoothest, and fastest of any in the field. Carriage return technique is consequently simplified and speeded up.

Foolproof Repeat Keys. Underscore . . . make hyphens . . . space backwards or forwards automatically—just by holding down the right key. The pupil can't make a mistake, because these repeat keys are independent of the regular keys.

Instant Space-Up Key. Wherever she is in the line, she just touches this bar and instantly gets as many spaces up on the sheet as needed without returning the carriage to the original margin. Increased production results.

Line Meter. This page-end indicator is simple to set and completely dependable. Takes almost no time to teach its use.

ROYAL®

STANDARD • ELECTRIC • PORTABLE
Roytype Business Supplies

CLIP COUPON!

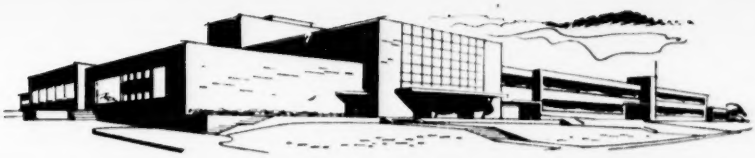
Royal Typewriter Co., Inc., School Department
2 Park Avenue, New York 16, N. Y.

Gentlemen: Please arrange for a demonstration of the new Royal Electric in my classes without obligation.

Name _____

School _____

City _____ **State** _____



Freeport Junior High School, Freeport, Illinois, equipped with 934 full-upholstered Bodiform chairs. Superintendent: B. F. Shafer. Architects: Childs & Smith, Chicago

AMERICAN BODIFORM AUDITORIUM CHAIRS

An impressive service to school and community

Economical maintenance and durability are assured by American Seating engineering. Also available with folding tablet-arm.

The luxurious, sustained comfort and matchless beauty of these chairs will stimulate attendance at auditorium programs—and help build community interest in all your school's activities.

Finest scientific construction insures relaxed sitting, maximum attentiveness and appreciation. Automatic, uniform-folding, silent, ¾ safety-fold seat action allows more passing and sweeping room. Full-fabric upholstery compensates acoustically for seat vacancies. Practical planning assistance gladly supplied by American Seating Engineers. Write for information.

American Seating Company

WORLD'S LEADER IN PUBLIC SEATING

Grand Rapids 2, Michigan • Branch Offices and Distributors in Principal Cities

Manufacturers of School, Auditorium, Theatre, Church, Transportation, Stadium Seating FOLDING CHAIRS

What's New . . .

Improved Tissue Has New Names

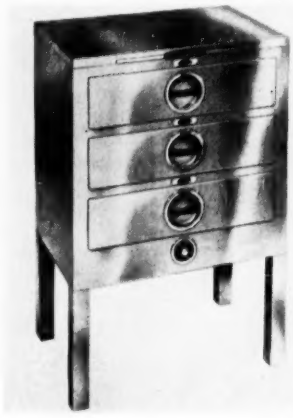
Nibroc toilet tissues have been materially improved in texture and quality and are now offered as Sofwite No. 10 and Softan. Sofwite No. 10 is a snowy white, single-ply toilet tissue with extra soft texture that is strong and absorbent. It is supplied in 1000 sheet rolls. Softan is the same extra-strong, soft, absorbent tissue but is offered in economical neutral beige color. It is supplied in 1000 and 1500 sheet rolls. **Brown Company, 150 Causeway St., Boston 14, Mass.**

For more details circle #269 on mailing card.

Hot-Food Servers Keep Food Flavorful

Food cooked in advance and placed in the drawers of the new Toastmaster Hot-Food Server is kept fresh and flavorful for hours without losing its appetizing appearance. Circulation of air is provided around all sides in the unique drawer construction to assure proper temperature throughout. Recessed thermostat control and cool Bakelite handles provide an attractive appearance without protrusions which might catch uniforms or aprons. The thermostat can be set to keep all foods at the exact temperature required, whether hot or cold. Humidity controls are easily set for the desired atmosphere and an individual control for each drawer allows storage of various types of food requiring differing degrees of moisture.

Drawers open all the way for easy insertion and removal of pans. They are designed to hold 12 by 20 inch No. 200



pans and are 5½ inches deep and 22½ by 13½ inches in size. Drawers and drawer covers are easily removed for cleaning. Both exterior and interior are of stainless steel for sanitation and easy maintenance and Fiberglas insulation prevents heat losses. The new De Luxe Hot-Food Server is available in three new models to fit small, medium and large requirements. To ensure correct operation of the server, an instruction tray is conveniently located at the top of the unit, providing a ready reference chart of proper operating instructions. Included is a complete list of food with recommended temperature and humidity settings for best results. **Toastmaster Products Div., McGraw Electric Co., Elgin, Ill.**

For more details circle #270 on mailing card.

Band Director's Stand Has Folio Cabinet

The No. 38 Band Director's Cabinet has a 6-inch additional height adjustment for convenience and to facilitate the use of a podium. It is combined with a sturdy portable all steel cabinet mounted on 3 inch ball bearing casters. Two folio doors open to the orchestra side, unexposed to the audience. The cabinet has two tiers of 25 shelves each, 13 by 15 inches, to hold 50 individual folios of music. A lamp with bracket is an integral part of the unit.

Developed in cooperation with music department heads, the combination stand and cabinet has light brown hammerloid finish. **Smith System Heating Co., Special Equipment Div., 212 Ontario St. S. E., Minneapolis 14, Minn.**

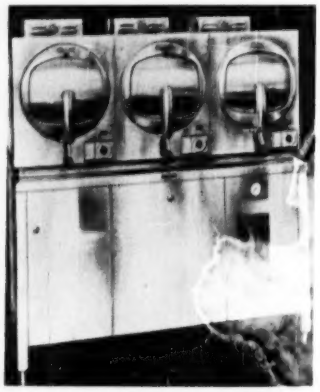
For more details circle #271 on mailing card.

(Continued on page 132)

What's New . . .

Three Cooking Compartments in Large Steam Unit

The Model 3ST-ASG Steam Pressure Cooker has three large cooking compartments, each designed to be used at full



capacity of thirty pounds of food. Each compartment has individual controls with full automatic cooking cycle controlled by the clock. Each compartment is at proper working level for more efficient and comfortable operation. The same boiler in the base of the unit provides up to 15 pounds steam pressure to each compartment. The unit is streamlined in appearance with all valves, manifolds and piping concealed. It is 56 inches wide, 30 inches deep and 60 inches high and accommodates standard cafeteria pans in each compartment. **Market Forge Co., 25 Garvey St., Everett 49, Mass.**

For more details circle #272 on mailing card.

Torque-Bar Operation of Auto-Lok Aluminum Window

An Auto-Lok Aluminum Awning Window is now available with Torque Bar Operation. The window retains all the [illegible] principles of the Auto-Lok Window. The new [illegible] brings in the bottom exerting pressure [illegible] any other vents, which are locked automatically by the patented Auto-Lok operating principle.

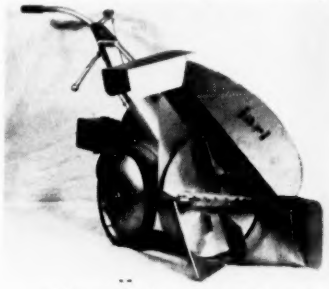
The new Model B torque bar assembly is radially inclined for strength and the bar is completely concealed in the sill. All anchor housings have been eliminated on the jambs for smooth, clean appearance. The Ludman Power-Light Operator in either over the sill or angle type styles provides smooth and easy operation with maximum power. The new Auto-Lok Torque Bar Aluminum Awning Window is available in the same types and sizes as the Model A Auto-Lok Standard Window. **Ludman Corporation, North Miami, Fla.**

For more details circle #273 on mailing card.

(Continued on page 134)

Heavy-Duty Thrower for Fast Snow Removal

Fast handling of snow removal around schools, colleges, hospitals and other institutions is possible with the new Champion heavy-duty snow thrower. The new rotary-type machine has nearly twice the horsepower of the Jari Junior snow thrower for handling large snow removal jobs. The Champion propels itself at 60 yards a minute, clearing a 20 inch wide swath through heavy, hard-packed or slushy snow. It is designed to clear away all types of snow quickly and completely without stalling or clogging. Operation is simple and easy as



it is self-propelled and needs only to be guided. The Champion has attachments for year-round grounds maintenance. **Jari Products, Inc., 2938 Pillsbury Ave. S., Minneapolis 8, Minn.**

For more details circle #274 on mailing card.

What's New . . .

Electronic Device Polices School-Area Traffic

An audible alarm to help control the speed of traffic in critical school areas is provided by a new electronic device. Known as Zonealarm Audible Alarm System, the device is installed at each entrance to the speed zones. Warning signs are set to advise drivers that the system is in use. When the signs are disregarded and vehicles enter the zones at speeds in excess of those selected as safe, a short siren warning is set off. Motorists are warned that they are exceeding speed limits and reduce their speed, and pupils and other pedestrians are alerted that vehicles are entering the zone at excessive speeds.

The Zonealarm Audible Alarm System was developed primarily to protect approaches to schools but can be used in other critical areas. The system is accurate and reliable and is simply installed and serviced. It works automatically during pre-selected times only, and no manpower is required to operate it. **Zonealarm Corp., 712 E. 163rd St., Cleveland 10, Ohio.**

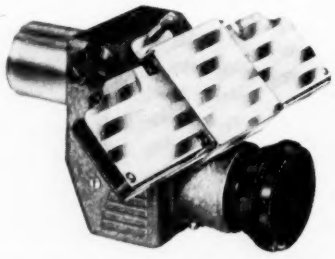
For more details circle #275 on mailing card.

Complete Sanitation Offered in Coved Sinks

The new Seco all-coved sinks, die-stamped of 14 gauge stainless steel or galvanized after fabrication, have every outside corner rounded and every inside corner coved for easy and complete cleaning. All bowls are one-piece, seamless, deep-drawn for ease of sanitation and are available in two standard sizes, 15 by 20 or 20 by 22 inches. The sinks are offered in 24 models with integral drainboards and bowls in a number of arrangements. Electric or gas heater can be furnished for sterilizing. **Seco Co., Inc., 5206 S. 38th St., St. Louis 16, Mo.**

For more details circle #276 on mailing card.

Opaque Projector Formed With Attachment



The Viewpaque is a new visual tool which transforms any Viewlex slide or slide and filmstrip projector into a low cost opaque projector in a moment. The Viewpaque attachment projects opaque objects with bright clarity and brilliance, in full screen size. Any opaque item, such as stamps, coins, charts, snapshots, drawings, plans, flowers and practically any other item can be projected to audiences, or used for close-up study of small detail or as a model for drawings with a Viewlex projector using the new Viewpaque attachment. **Viewlex, Inc., 35-01 Queens Blvd., Long Island City 1, N.Y.**

For more details circle #277 on mailing card.

Electric Sets Have Automatic Start-Stop

Relays necessary for unattended operation are included in the new automatic start-stop equipment now available on the large V-type Cat Diesel Electric Sets. The initiating contacts close when the regular power source fails, allowing a magnetic starter switch to activate the starting motors from battery current. The cycle continues until a load transfer switch applies the load to the electric set within a few seconds after power failure.

When regular power resumes, the load transfer switch starts the cycle to transfer the load back automatically to the regular electrical source. Thus continuous power is ensured under all conditions. Safety signals are included in the arrangement. **Caterpillar Tractor Co., Peoria, Ill.**

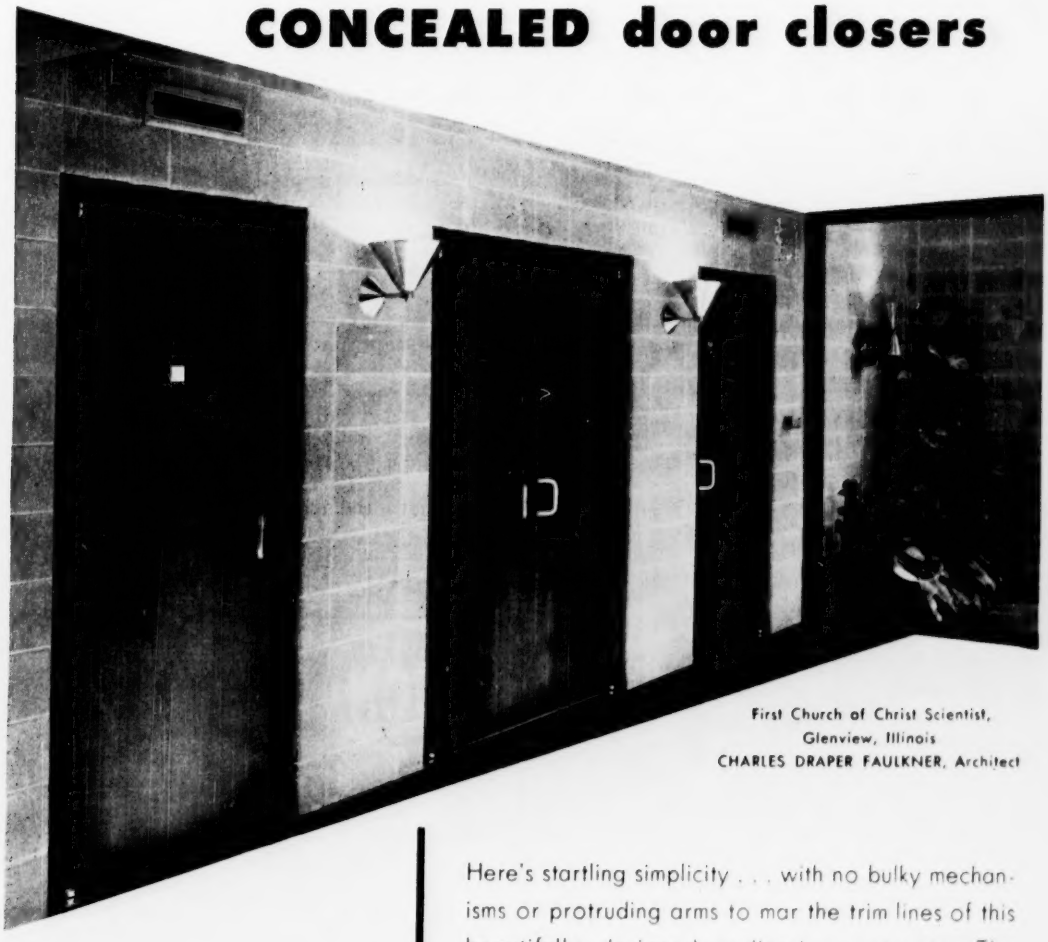
For more details circle #278 on mailing card.

(Continued on page 136)

modern architectural beauty

that could only be accomplished with

CONCEALED door closers



First Church of Christ Scientist,
Glenview, Illinois
CHARLES DRAPER FAULKNER, Architect

RIXSON

UNI-CHECKS and DUO-CHECKS
for interior doors

Send for your copy of the new condensed RIXSON catalog.

Here's startling simplicity . . . with no bulky mechanisms or protruding arms to mar the trim lines of this beautifully designed auditorium entrance. The RIXSON Uni-checks that silently bring these modern doors to a gentle close are firmly embedded in the rigid floor . . . out of sight and out of the way . . . where they cannot be tampered with or gather dust or dirt.

And, as many architects have learned, you pay no premium for the advantages of concealed closers for interior doors . . . installed, RIXSON Uni-checks and Duo-checks really cost no more.

THE OSCAR C. RIXSON CO.
9100 west belmont ave. · franklin park, ill.

What's New . . .

Glazed Wall Tile Now Offered in Large Size

A new large sized glazed wall tile is now available. The 9 by 6 by ½ inch sized tiles are of smooth glazed Mosaic Clay Tile requiring lowest-cost substructure and providing permanent beauty, sanitation and easy maintenance. The tile is especially suited for walls in kitchens, cafeterias, laboratories, corridors, home economics rooms, lobbies and other areas which must be kept clean and sanitary and withstand hard wear.

Large sized Mosaic Glazed Wall Tile can be installed by either conventional or thin-setting bed methods, requires no expensive special trim shapes, and has integral spacers for uniform close joints. It is available in the full range of Mosaic Harmonitone-Matt and Bright Glaze colors. It can be combined with other Mosaic Clay Tile for installations offering durability and ease of maintenance. **The Mosaic Tile Company, Zanesville, Ohio.**

For more details circle #279 on mailing card.

Teaching Aid Offered in C-Vue Boards

Symbols or signs can be placed in any desired position on the C-Vue board and will stick without the use of tacks, glue or staples. The C-Vue board is constructed of Masonite, surfaced with the special C-Vue flannel, framed in double lacquered wood and supported by a strong, locking, metal easel. Three point rubber suspension permits using

the board on table or desk without scratching. With the easel folded out of the way, the board can be used in the chalk tray.

Six sheets of fuzzy-backed symbol stock are provided with each kit. Four sheets have animated figures in color and there are two blank sheets, permitting the creation of special symbols by the teacher or students. In teaching, symbols and signs are placed on the board and removed with a minimum of effort. The boards are effective for teaching the concept of numbers, basic arithmetic, color recognition and other elementary subjects, as well as for teaching advanced subjects such as physics, mathematics, navigation and the like. C-Vue teaching boards are available in sizes 18 by 30 inches, 28 by 36 inches and 36 by 48 inches. Carrying cases are available as accessories if desired. **Chase Bag Company, 1500 S. Delaware Ave., Philadelphia 47, Pa.**

For more details circle #280 on mailing card.

Locking Device Makes Safe Scaffolding

A new locking device developed for use in scaffolding is an integral part of the frame. It provides a built-in safety feature for joining and holding scaffold frames rigidly and firmly. The Tasco locking device and scaffold frame have been thoroughly tested and subjected to hard usage. The scaffold frame is made of steel or aluminum, depending upon use.

The locking device permits a section of the scaffold to be folded for storage or for carrying to a new location, eliminating the need for disassembling for moving through doorways or narrow passageways. When built up, the scaffolding can be mounted on casters for easy movement. Basic frames are manufactured in sections of varying lengths for speedy erection. **The American Scaffolding Co., 1815 Woodland N. E., Warren, Ohio.**

For more details circle #281 on mailing card.

(Continued on page 138)

What's New . . .

Coin-Operated Vender for Milk Distribution

The new Sunroc refrigerated vendor is a coin-operated bulk milk machine holding 40 quarts. The cabinet model is similar in operation to the model M1 bulk milk dispenser offered by the company for cafeteria and lunch room use. The model MV-1 has a change maker, an automatic metering device, and serves the milk in a paper cup. A metering device activates the dispensing mechanism and accurately records the number of drinks dispensed as it automatically compensates for variation in milk level as each cup is drawn. Every cup of milk dispensed is the same measure. The vendor provides a source of income or a quick means of dispensing milk at cost. **Sunroc Refrigeration Company, Glen Riddle, Pa.**

For more details circle #282 on mailing card.

Improved Models for Efficient Dishwashing

Several improvements have been made in two models of Jackson Dishwashers. Models 10A and 10M are basically alike except that Model 10A is designed for automatic operation. Both machines have stainless steel hoods and bases which resist deterioration by harsh detergents. Wash jet pressure has been greatly increased and the pressurized rinse tank utilizes static water pressure to ensure a heavy spray at the beginning of the rinse cycle. Wash and rinse thermometers are provided and a new built-in vacuum breaker prevents back siphonage into water supply lines.

Both models retain the Jackson features of revolving hood for straight through operation and thermostatically controlled immersion heater in the rinse reservoir. There is a sealed timer and switch mechanism on the automatic model. Operating capacity of the new machines is 40 racks, 950 dishes or 1200 glasses per hour. **Jackson Products Co., 3700 E. 93rd St., Cleveland 5, Ohio.**

For more details circle #283 on mailing card.

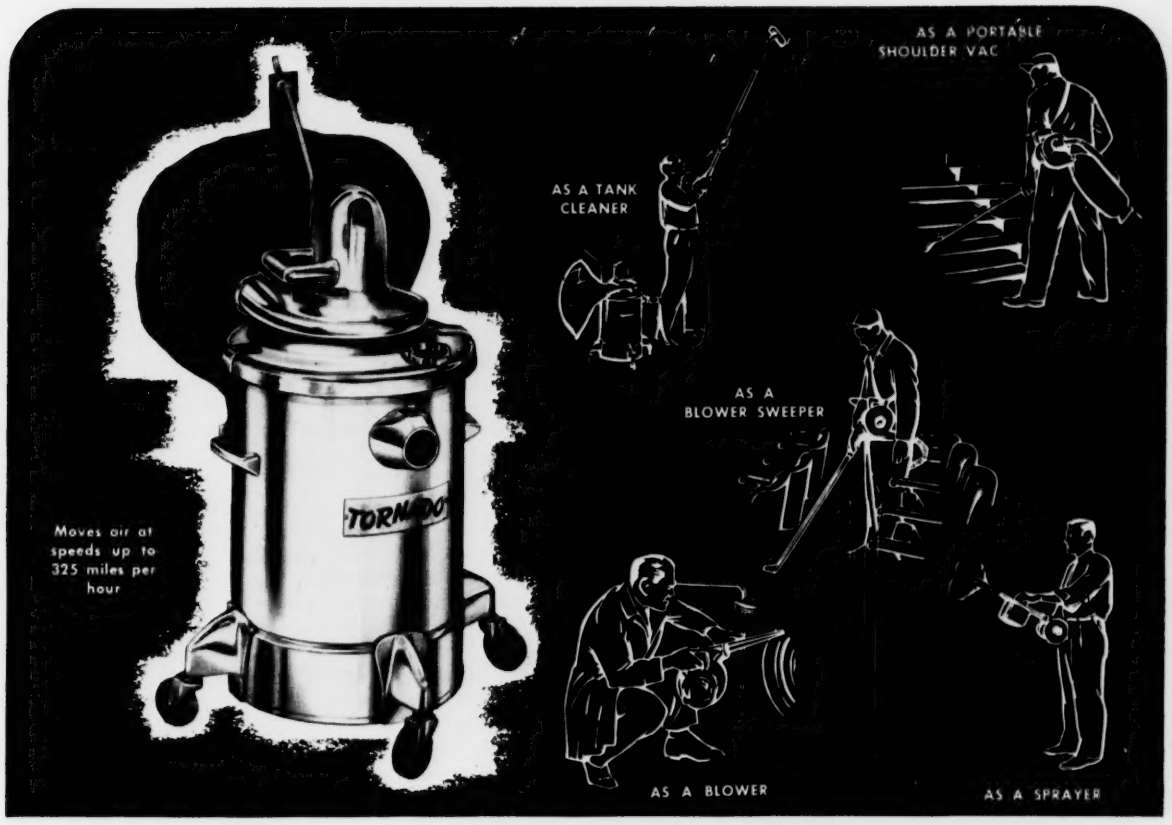
(Continued on page 140)

Basketball Net for Elementary Schools

A popular addition to school playgrounds and gymnasiums for elementary pupils is offered in the Model JLK-3 Little Kid Basketball Net. Made of cadmium plated steel, as are the regulation Jayfro nets, the new model has been especially designed to fit all models of junior basketballs. The net can be used indoors and outdoors and is guaranteed not to scratch the ball. It is constructed for years of use, to eliminate wear and

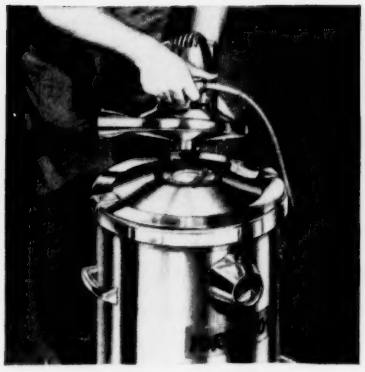
tear and replacement problems, and to fit the needs of boys and girls in the six to twelve year age bracket. **Jayfro Athletic Supply Co., P.O. Box 1065, New London, Conn.**

For more details circle #284 on mailing card.



NEW TORNADO® VACUUM CLEANER

offers More Versatile Cleaning from Floor to Ceiling



A quarter turn quickly removes the Tornado motor unit for many other uses. All sizes are interchangeable.

Here's a great New Tornado commercial vacuum cleaner with increased power that speeds-up cleaning while it does a better job. Pick up everything with your New Tornado—dirt, dust, liquids, oils, chips or debris without any bother of conversion.

What's more, your same Tornado can be used as:

1. A portable shoulder type vac
2. A powerful portable electric blower
3. A high capacity sprayer for insecticides
4. A portable blower-sweeper for debris

No matter what your cleaning problem is, if the job is being done with air, brushes, brooms or rags—you can do it faster and better with Tornado.

The powerful new motor and other advanced design features ask no favors. Tornado is ready at all times to do the toughest, dirtiest jobs for hours and hours of constant duty.

Write for an on-the-spot demonstration by a Tornado cleaning engineer.

We can't begin to tell you all of the new, improved features of the New Tornado—but Bulletin 660 will—Write for it today.

BREUER ELECTRIC MFG. CO.

5098 North Ravenswood Avenue • Chicago 40 Illinois

What's New . . .

Product Literature

• Data on how to select the microscopes and accessories required by laboratory technicians, researchers and science educators is presented in a new **Booklet D-185, "Bausch and Lomb Dynoptic Laboratory Microscopes,"** published by Bausch & Lomb, 635 St. Paul St., Rochester, N. Y. The 28 page illustrated guide discusses all microscope needs.

For more details circle #285 on mailing card.

• **"School Shops for Today and Tomorrow"** is the title of a new 42 page booklet on planning of school workshops published by the Delta Power Tool Division, Rockwell Manufacturing Co., 400 N. Lexington Ave., Pittsburgh 8, Pa. The book includes plans chosen by five American leaders in the school field as winners in an international contest. It is intended as an aid to school planners in expanding school shop facilities to meet the needs of increased enrollment. The book replaces an earlier book on "How to Plan a School Workshop" and is said to be the only compilation of plans on this phase of school planning concurring with current professional thinking on the subject. The booklet contains 25 sets of plans with accompanying text, and is listed at one dollar with a lower charge to school planners and architects.

For more details circle #286 on mailing card.

• A new catalog, **"Index of Contemporary Design,"** has been published by Knoll Associates, Inc., 575 Madison Ave., New York 22. The 64 page book carries 132 illustrations in four colors and presents the international collection of Knoll furniture and textiles. The catalog is divided into four sections devoted to Chairs, Tables, Beds, Chests and Cabinets, and Textiles.

For more details circle #287 on mailing card.

• **"How to Make Stairs and Walkways Safe"** is the title of a new booklet brought out by Wooster Products, Inc., Wooster, Ohio. The purpose of the booklet is to acquaint building maintenance supervisors with the fundamentals of stairway safety. Various technics are described for repairing stairs and information is given on how to make worn stairs like new in one day without interruption of traffic.

For more details circle #288 on mailing card.

• A 68 page catalog of **"Equipment and Supplies for Early Childhood Education"** has recently been announced by Childcraft Equipment Co., Inc., 155 E. 23rd St., New York 10. The new publication serves the dual purpose of an educational supply source book as well as a textbook or practical guide for nursery, kindergarten and primary school play programming.

For more details circle #289 on mailing card.

• **Institutional Projection Screens** are illustrated and described in a new **Pocket Catalog** issued by Radiant Manufacturing Corp., 2627 W. Roosevelt Rd., Chicago 8. Included are helpful hints on how to choose projection screens, best projection surface and correct size for projection screen.

For more details circle #290 on mailing card.

• The American Automobile Association, 1712 G St., N.W., Washington 6, D.C. has recently released an illustrated folder on **"Driver Training Equipment."** The folder gives complete information on the various types of equipment used to test the student's reaction time and vision. Teaching aids, driver evaluator tests and road training devices are also fully discussed and illustrated.

For more details circle #291 on mailing card.

• **Air cleaning and control problems** are discussed in a new bulletin recently released by Electro-air Cleaner Co., 1285 Reedsdale St., Pittsburgh 33, Pa. The answer to this problem has been found with the recent development of inexpensive electronic equipment capable of effectively eliminating air-borne contamination. The new bulletin gives complete and detailed information on this equipment including construction features, specifications, dimensions and installation possibilities.

For more details circle #292 on mailing card.

(Continued on page 142)

What's New . . .

• **Catalog 5418** is a 40 page booklet covering the new **Attachments and Accessories** offered by South Bend Lathe, South Bend 22, Ind. Full specifications, with illustrations and descriptive text on the complete line of machine tool attachments and accessories offered by the company are covered in the catalog.
For more details circle #293 on mailing card.

• Complete information on the **Kewanee Reserve Plus Rating Plan** is given in a booklet entitled, **"A Report to Those Concerned With the Specification, Selection, Sale of Steel Firetube Boilers."** The booklet is published by Kewanee-Ross Corporation, Kewanee, Ill. to correct the confusion in the boiler industry caused by the variance in presentation of data concerning steel boiler ratings.
For more details circle #294 on mailing card.

• **"The Electronic Control Story"** is told in a new 24 page booklet, F 6437, issued by Barber-Colman Company, Rockford, Ill. The booklet was written to aid in understanding the fundamentals of electronic temperature controls and their application and is complete with simplified, easy-to-understand diagrams and non-technical descriptive text. It is written in editorial style with line drawings illustrating the points covered.
For more details circle #295 on mailing card.

• **"Daylighting Your Schools"** is the title of an eight page brochure on Wasco-lite Skydomes and Ventdomes issued by the Wasco Flashing Company, 87 Fawcett St., Cambridge 38, Mass. The instructive, illustrated brochure suggests a solution to the problem of adequate school illumination through the use of toplighting and gives graphic data on its effective use in schools as illumination and ventilation factors.
For more details circle #296 on mailing card.

Film Releases

Exploring Art Series of 3 color films, 5 minutes each: "Crayon Resist," "Torn Paper" and "Monotype Prints." "Flowering Desert," Kodachrome, 11 minutes. "Spanish Enriches the Elementary Curriculum," color, 14 minutes. "ABC of Puppet Making," Reel One and Reel Two, black and white or color. **Bailey Films, Inc., 6509 De Longpre Ave., Hollywood 28, Calif.**
For more details circle #297 on mailing card.

"The Road to Canterbury," Technicolor, 16 mm. sound, 2 reels, 23 minutes. "The Thames—from Royal Windsor to Tilbury," Technicolor, 16 mm. sound, 1 reel, 10 minutes. "Bannister's 1-Minute Mile," 16 mm. sound, 1 reel, 6 minutes. "Ulster Magazine," 16 mm. sound, 2 reels, 20 minutes. "Amenu's Child," 16 mm. sound, 33 minutes, black and white film. "Local Newspaper," 16 mm. sound, 2 reels, 17 minutes. **British Information Services, 30 Rockefeller Plaza, New York 20.**
For more details circle #298 on mailing card.

"Making Change for a Dollar," "Stores in Our Community," "How Machines and Tools Help Us," "Story of Weights and Measures," "Light All About Us," "Sounds All About Us," "Winter Is an Adventure," "Discovering the Library," "The Making of the River," and "Clothes and You: Line and Proportion," all 1 reel, sound, color or black and white. "A Midsummer Night's Dream: Introduction to the Play," 1¼ reels, sound, color or black and white. "Simple Machines," series of four 16 mm. sound films for intermediate and junior high classes, covering levers, pulleys, inclined planes and wheels and axles. **Coronet Films, 65 E. South Water St., Chicago 1.**
For more details circle #299 on mailing card.

"Air Adventure to Europe," 16 mm., color, sound, 32 minutes for group showings, 27 minutes for TV version. **Institute of Visual Training, 40 East 49th St., New York 17.**
For more details circle #300 on mailing card.

"Picture Stories for Reading Readiness," color, a series of 7 filmstrips: "The Squirrels' Picnic," "Lost at the Fair," "The Loose Tooth," "Puppy Plays a Trick," "Buying a Pet," "Surprise for Daddy," "Let's Go to the Zoo." "The Farmer's Animal Friends," color, a series of six filmstrips dealing with cows, horses, pigs, sheep, chickens and cats. **The Jam Handy Organization, 2821 East Grand Blvd., Detroit 11, Mich.**
For more details circle #301 on mailing card.

"TB—Everybody's Problem," educational filmstrip in the series on tuberculosis, color. Accompanied by a Guide for its use and take-home material for the student. **National Tuberculosis Association, 1790 Broadway, New York 19.**
For more details circle #302 on mailing card.

"Uneasy Peace in Asia," 57 frames, and "The Shadow of the Kremlin," 56 frames, black and white, 35 mm. filmstrips on current affairs. **The New York Times, Office of Educational Activities, Times Square, New York 36.**
For more details circle #303 on mailing card.

"You Can Win Elections," documentary film, 2 reels, color or black and white, Melvin Douglas. **Roosevelt University, 430 S. Michigan Ave., Chicago 5.**
For more details circle #304 on mailing card.

"Steps in Building a Paragraph," color, captions, original illustrations, series of 4 filmstrips of 40 frames each designed to teach the fundamentals of creative writing. **Society for Visual Education, 1345 W. Diversey Pkwy., Chicago 14.**
For more details circle #305 on mailing card.

"What About Drinking," part of Young America's Discussion Problems series, 16 mm., sound, 1 reel. "Life in Ancient Times Series," color, series of 6 filmstrips: "Life in the New Stone Age," "Life in Ancient Egypt," "Life in Ancient Rome," "Life in Ancient Greece," "Life in a Medieval Castle" and "Life in a Medieval Village." "Indians of the Southwest," color, series of 6 filmstrips: "Clothing," "Food," "Shelter," "Arts and Crafts," "Life and Customs" and "Dances and Ceremonies." **Young America Films, Inc., 18 East 41st St., New York 17.**
For more details circle #306 on mailing card.

Suppliers' News

Armstrong Cork Company, Lancaster, Pa., manufacturer of hard-surface floor coverings, announces the acquisition of the stock of the **Deltox Rug Company, Oshkosh, Wis.,** manufacturer of soft-surface floor coverings, including fiber and combinations of fiber, wool and rayon.

Consoweld Corporation, Wisconsin Rapids, Wis., manufacturer of plastic laminates, announces the opening of a new modern plant which will nearly triple production under former plant facilities. The new plant produces a decorative thermosetting plastic laminate in two thicknesses and 46 patterns and colors.

The Gotham Chalkboard & Trim Corp., manufacturer of green chalkboards and bulletin boards, announces the opening of a new modern daylight factory at **91 Weyman Ave., New Rochelle, N.Y.** The new plant was constructed to afford adequate room for the company's expanded production plans.

Meierjohan-Wengler Company, 1102 W. 9th St., Cincinnati 3, Ohio, manufacturer of fine-cast, hand-finished bronze memorial plates, portrait tablets and ornamental lighting fixtures, announces the completion of its new building. The addition houses offices, display room and enlarged drafting and design studios for better customer service.

Pittsburgh Reflector Company, Oliver Bldg., Pittsburgh 22, Pa., manufacturer of fluorescent and incandescent lighting equipment for the institutional, commercial and industrial markets, announces the merging of its company with **Holden Lighting Manufacturers Ltd. of Toronto, Ontario, Canada.**

Reliable Metal Novelty Company, Inc., Mount Vernon, N.Y., manufacturer of bathroom accessories, announces the purchase from **Conant Brothers Company, Inc., Medford, Mass.,** of the complete production tooling set-up and inventory of its forged brass bathroom accessories for installation in hospitals, schools and other institutional buildings.

Universal Dishwashing Machinery Co., Nutley, N.J., manufacturer of dishwashing equipment, announces the opening of a Western Branch show room and office at **2707 W. 54th St., Los Angeles 43, Calif.**

PRODUCT INFORMATION

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Duplex Straw Dispenser Co.

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Key

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288 "How to Make Stairs Safe"
Wooster Products Inc.

289 "Equipment for Early Childhood"
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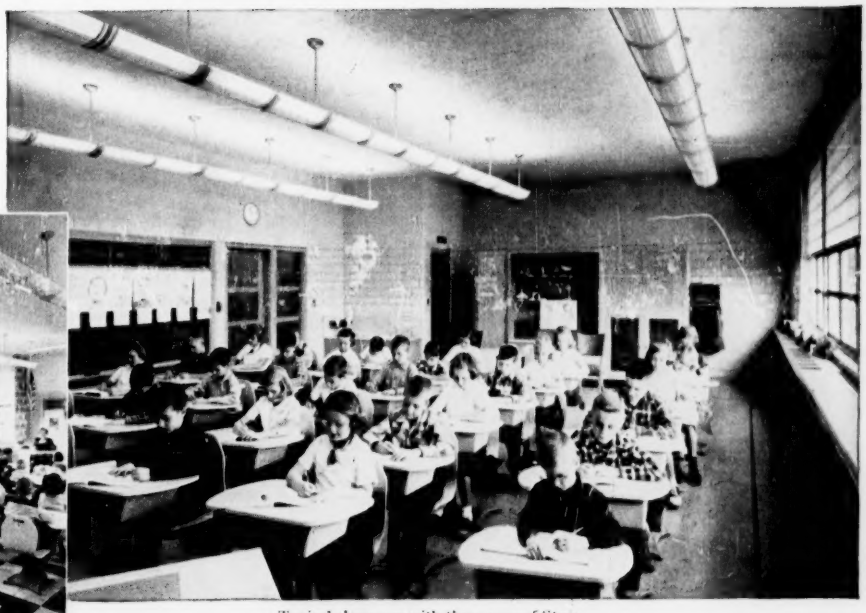
Architect: Berger, Kelley & Samuelson, Champaign, Illinois.

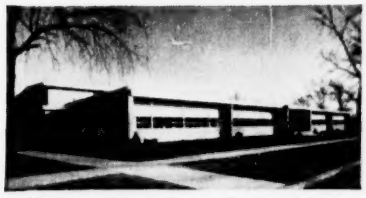
Electric Contractor: Okeh Electric Company, Chicago.

Kindergarten with three rows of Stars (one row not shown).



Typical classroom with three rows of Stars.

Wakefield Luminous-Indirect STARS Belong in Such Well Planned Schools

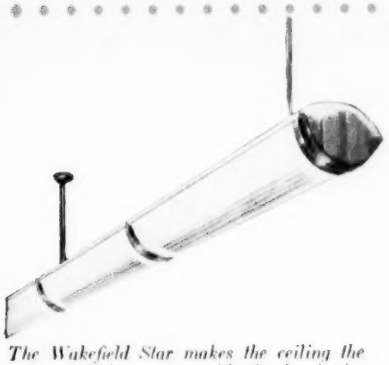


Field Park School, Western Springs, Illinois
(Forest Hills School not shown.)

In presenting two new elementary schools to the residents of Western Springs, Illinois, Superintendent of Schools James V. Moon said: "We believe that to strengthen faith in democracy, democratic living must take place in the classroom." This is possible "when both school and curriculum provide ample opportunity for boys and girls to work together in small groups to solve common problems."

Mr. Moon went on to say: "Each classroom has its own color scheme, yet colors have been carefully selected to blend harmoniously throughout the schools. Special attention has been given to providing the best in heating, ventilating, acoustical materials and lighting, both natural and artificial."

The F. W. Wakefield Brass Company is proud that its well-known luminous-indirect Star was chosen to light classrooms based on such a forward-looking philosophy. For full information write The F. W Wakefield Brass Company, Vermilion, Ohio. In Canada: Wakefield Lighting Limited, London, Ontario.



The Wakefield Star makes the ceiling the primary light source, with the luminaire itself and the side walls becoming a secondary source. Thus the light is distributed uniformly and is free from glare and sharp brightness contrasts. The translucent Plaskon reflector, which slides in and out like a drawer, completely shields the lamps; when the lamps are lit, the luminaire has about the same brightness as the ceiling.

Wakefield Over-ALL Lighting

WAKEFIELD GEOMETRICS · THE CAVALIER · THE GRENADIER · THE PACEMAKER · THE COMMODORE · THE STAR · THE WAKEFIELD CEILING

Leading Manufacturers of Fluorescent Tubes say:

CERTIFIED CBM BALLASTS

are Tailored to the Tube

No one knows better the value of CERTIFIED CBM BALLASTS than the manufacturers of fluorescent tubes. For the satisfactory performance of their lamps is vitally dependent on the ballasts that operate them. Here's what they say:

CHAMPION *says:*
"Fluorescent lamps are designed to operate at specific electrical values. The use of auxiliary equipment that has been proven to meet these agreed upon standards will assure the user maximum value for his lighting dollar with a minimum of operational failures. Certified Ballasts are inexpensive insurance."

GENERAL ELECTRIC *says:*
"The life and light output ratings of fluorescent lamps are based on their use with ballasts providing proper operating characteristics. Ballasts that do not provide proper electrical values may substantially reduce either lamp life or light output, or both. Ballasts certified as built to the specifications adopted by the Certified Ballast Manufacturers (CBM) do provide values that meet or exceed minimum requirements. This certification assures the lamp user, without individual testing, that lamps will operate at values close to their ratings."

SYLVANIA *says:*
"The light and life ratings of fluorescent lamps are based on three hour burning cycles under specified conditions and with ballasts meeting American Standards Association specifications. Ballasts marked with the CBM emblem and certified by Electrical Testing Laboratories, Inc., meet ASA specifications."

WESTINGHOUSE *says:*
"Use ballasts that are tested and Certified by Electrical Testing Laboratories or ones that are otherwise known to meet the specifications of the lamp manufacturer. These will give best results with Westinghouse fluorescent lamps."

By using fluorescent fixtures that are equipped with CERTIFIED CBM BALLASTS you are assured long lamp life, full light output and trouble-free operation.

That's why CERTIFIED CBM BALLASTS merit the slogan—Tailored to the Tube.

CERTIFIED BALLAST MANUFACTURERS

Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO